



The Louisiana Regional Restoration Planning Program



Final
Regional Restoration Plan
Region 2



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Louisiana Department of Environmental Quality
Louisiana Department of Natural Resources
Louisiana Department of Wildlife and Fisheries
Louisiana Oil Spill Coordinator's Office, Office of the Governor
National Oceanic and Atmospheric Administration
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CHAPTER 1 INTRODUCTION

Federal and Louisiana natural resource trustees have developed a statewide Louisiana Regional Restoration Planning Program to assist the natural resource trustees in carrying out their Natural Resource Damage Assessment (NRDA)¹ responsibilities for discharges or substantial threats of discharges of oil (referred to as an “incident”). The goals of this statewide Louisiana Regional Restoration Planning Program are to: 1) expedite and reduce the cost of the NRDA process; 2) provide for consistency and predictability by describing in detail the NRDA process, thereby increasing understanding of the process by the public and industry; and 3) increase restoration of lost trust resources and services. Attainment of these goals will serve to make the NRDA process as a whole more efficient in Louisiana.

The Oil Pollution Act of 1990 (OPA) (33 USC 2701 *et seq.*), and the Louisiana Oil Spill Prevention and Response Act of 1991 (OSPRA) (La. Rev. Stat. 30:2451 *et seq.*), are the principal federal and state statutes, respectively, authorizing federal and state agencies and tribal officials to act as natural resource trustees for the recovery of damages for injuries to trust resources and services resulting from incidents in Louisiana. The Louisiana Regional Restoration Planning Program is being established to address incidents under OPA and OSPRA. A complete description of the Louisiana Regional Restoration Planning Program is provided in the Louisiana Regional Restoration Planning Program Final Programmatic Environmental Impact Statement (FPEIS) (National Oceanic and Atmospheric Administration [NOAA] *et al.* 2007). Copies of the Louisiana Regional Restoration Planning Program FPEIS may be obtained by contacting:

NOAA/Damage Assessment Center Headquarters
1305 East West Highway, Suite 10218
Silver Spring, Maryland 20910
(301) 713-3038

or

Louisiana Oil Spill Coordinator’s Office, Office of the Governor
150 Third Street, Suite 405
Baton Rouge, Louisiana 70801
(225) 219-5800

This document is a Final Regional Restoration Plan (RRP) for Region 2 and is the first of the nine regional plans being developed under the Louisiana Regional Restoration Planning Program (see Figure 1, *RRP Regions*). Under the National Environmental Policy Act of 1969 (NEPA) (42 United States Code [USC] 4321 *et seq.*) regulations, 40 CFR 1500.4(i) and (k)², 40

¹ Natural resource damage assessment is the mechanism by which the trustees pursue damages from responsible parties to compensate the public for any injuries to natural resources.

² Sec. 1500.4(i) - Using program, policy, or plan environmental impact statements and tiering from statements of broad scope to those of narrower scope, to eliminate repetitive discussions of the same issues (Secs. 1502.4 and 1502.20). Sec. 1500.4(k) Integrating NEPA requirements with other environmental review and consultation requirements (Sec. 1502.25).

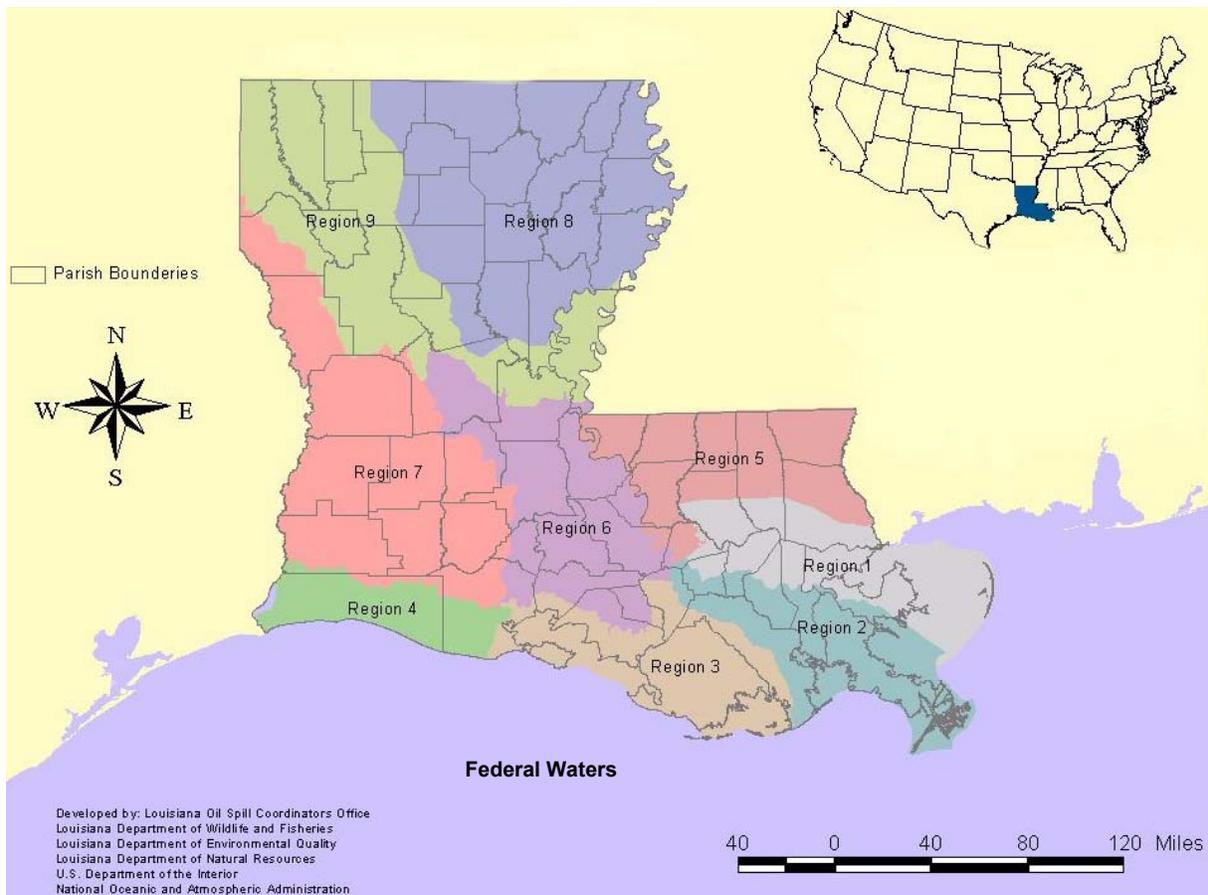


Figure 1: RRP Regions

CFR 1502.20³, the trustees will tier by both reference and incorporation information relevant to an incident-specific Damage Assessment and Restoration Plan/Environmental Assessment (DARP/EA). Specifically, the analyses from the Louisiana Regional Restoration Planning Program FPEIS (NOAA *et al.* 2007) and the relevant information from the RRP will be included in the DARP/EAs, as appropriate. The following items can be tiered from the Louisiana Regional Restoration Planning Program FPEIS (NOAA *et al.* 2007) and this document to site-specific and more detailed analyses: general descriptions of the physical and biological environment; descriptions of the regional boundaries of the RRP; restoration types; settlement types; general description of the Louisiana Regional Restoration Planning Program; general descriptions of environmental consequences and impacts; descriptions of potentially injured trust resources and services; restoration type selection criteria; project selection screening criteria; and descriptions of the nexus analysis. Decisions on the selection of restoration types

³ Sec. 1502.20 - Tiering. Agencies are encouraged to tier their environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review (Sec. 1508.28). Whenever a broad environmental impact statement has been prepared (such as a program or policy statement) and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or policy (such as a site-specific action) the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action. The subsequent document shall state where the earlier document is available. Tiering may also be appropriate for different stages of actions (Sec. 1508.28).

and projects to be implemented as part of the restoration planning process for a specific incident are subject to NEPA requirements. Therefore, the trustees will reference and/or incorporate appropriate information and analyses from both the Louisiana Regional Restoration Planning Program FPEIS (NOAA *et al.* 2007) and RRP's when preparing the DARP/EA for a specific incident or incidents.

This chapter provides summary background information on the Louisiana Regional Restoration Planning Program, including its goals, objectives, components, and benefits. Chapter 2, *Region 2 – Description*, describes the boundaries of Region 2 and the affected environment. Chapter 3, *Regional Restoration Plan*, describes the Region 2 RRP, including the trust resources and services that are likely to be or anticipated to be injured by an incident, the appropriate restoration types for each of the “potentially injured trust resources and services,” the restoration alternatives that have been identified to date in Region 2, and the development process for the Region 2 RRP. The appendices contain information about the biological resources and associated habitat types in Region 2 (see Appendix A, *Common Biota and Associated Habitat Types in Region 2*), the NRDA Restoration Project Information Sheet (see Appendix B, *NRDA Restoration Project Information Sheet*), the list of restoration alternatives identified to date in Region 2 according to restoration type (see Appendix C, *Region 2 RRP Restoration Projects*), Public Comments on the Draft RRP for Region 2 (see Appendix G, *Public Comments and Responses*), the list of Organizations Receiving Copies of the Final RRP for Region 2 (Appendix H, *List of Organizations to Which the Region 2 – Regional Restoration Plan was Mailed*), and the results of the Endangered Species Act and Essential Fish Habitat Consultations (Appendix I, *Endangered Species Act and Essential Fish Habitat Consultations*). [Note: Appendices D, E, and F of the September 2003 Draft RRP for Region 2, which contained the technical papers providing the basis for the Region 2 unit-costs for the “Non-Project-Specific Cash Settlement” alternative, have been reserved pending determination of feasibility of the development of unit-costs for all regions. Therefore, references to the settlement alternative of “Non-Project-Specific Cash Settlement” in the September 2003 Draft RRP for Region 2 have been removed from this Final RRP document. If feasibility of the unit-cost concept across all regions is determined at a later date, this Final RRP may be amended to include this settlement alternative.

Louisiana Regional Restoration Planning Program Summary

The Louisiana Regional Restoration Planning Program identifies the statewide Program structure, decision-making process, and criteria that are used to select the restoration project(s) that may be implemented to restore the trust resources and services injured by a given incident. Specifically, the Louisiana Regional Restoration Planning Program defines, expands, and/or refines the following important components of the existing NRDA process:

- ◆ Potentially Injured Trust Resources and Services;
- ◆ Restoration Types (including nexus analysis⁴ and environmental consequences analysis of implementation);
- ◆ Settlement Alternatives;
- ◆ Screening Criteria; and
- ◆ Regional Boundaries of the RRP's.

⁴ According to the NRDA regulations at 15 CFR 990 *et seq.*, trustees must consider compensatory restoration actions that provide services of the same type and quantity, and of comparable values as those lost. In the nexus analysis, restoration types are evaluated to determine how well the restoration would address the injuries to “potentially injured trust resource and services” affected by the incident.

Potentially Injured Trust Resources and Services

The Louisiana Regional Restoration Planning Program defines those trust resources and services in Louisiana that are likely to be or are anticipated to be injured (*i.e.*, at-risk) by incidents as “potentially injured trust resources and services.” Pre-identification of these “potentially injured trust resources and services” will facilitate the development of the RRP and assist in the coordination of response activities by informing agency personnel who are participating in the incident response (*i.e.*, clean up) of trust resources and services that may be of greatest concern to the trustees. The “potentially injured trust resources and services” are defined under three broad categories: coastal, inland, and statewide.

Restoration Types

The Louisiana Regional Restoration Planning Program identifies restoration types that are appropriate for the restoration of injuries for each of the identified “potentially injured trust resources and services” in the Louisiana Regional Restoration Planning Program. These restoration type categories are:

- ◆ Creation / Enhancement of Habitat;
- ◆ Physical Protection of Habitat;
- ◆ Acquisition / Legal Protection of Resources and Services;
- ◆ Stocking of Fauna;
- ◆ Physical Protection of Fauna;
- ◆ Restoration of Recreational Resource Services; and
- ◆ Restoration of Cultural Resource Services.

The Louisiana Regional Restoration Planning Program describes the specific restoration type(s) in each restoration type category that is appropriate for the restoration of injuries to each of the identified “potentially injured trust resources and services” in the Louisiana Regional Restoration Planning Program. This determination of the range of appropriate restoration types is based on a nexus analysis and entailed matching appropriate restoration types with potentially injured trust resources and services. The trustees have also conducted an environmental consequences analysis by evaluating impacts of implementation of various restoration techniques on the restoration types. Carrying out both analyses will result in technical process, and NEPA compliance efficiencies at the case level during the Restoration Planning Phase. The trustees will be able to use relevant analysis and information from the Louisiana Regional Restoration Planning Program FPEIS (NOAA *et al.* 2007) and RRP to produce the incident(s)-specific DARPs/EAs.

The trustees have also developed restoration type selection criteria to assist in determining which of the various restoration types identified are most appropriate to restore the trust resources and services injured during a given incident. It is anticipated that the criteria will also provide a level of predictability to the public and affected parties regarding restoration project selection. Furthermore, projects in each RRP will be classified by restoration type to facilitate the selection of specific restoration projects based on the type of trust resources and services injured. This approach will streamline the process of evaluating and selecting preferred restoration project(s) to be reviewed by the public.

Settlement Alternatives

The Louisiana Regional Restoration Planning Program describes a number of additional case settlement alternatives to assist the trustees and Responsible Parties in negotiations to resolve Responsible Party liabilities for incidents. These additional settlement alternatives generally represent different ways of resolving liability from an incident under one or the other (or both) of the two options: Responsible Party-implemented restoration, or Responsible Party cash settlement and trustee-implemented restoration. These settlement alternatives also may provide opportunities for implementing restoration projects more quickly and cost-effectively, pooling settlements to implement larger projects than could otherwise be accomplished by using individual settlements, and, potentially, facilitating implementation of more ecologically significant projects.

Screening Criteria

In order to improve the consistency, predictability, and accountability of the NRDA decision-making process, the trustees identified and defined project selection and other screening criteria to be used in implementing the Louisiana Regional Restoration Planning Program. These criteria are for:

- ◆ Selection of restoration projects to be incorporated into each RRP;
- ◆ Selection of most appropriate restoration type(s) to restore the injured trust resources and services in a case (discussed above); and
- ◆ Project selection screening of specific restoration actions required for a case.

Regional Boundaries of the RRPs

The Louisiana Regional Restoration Planning Program established nine regions for which regional plans will be developed. There are four coastal regions based on the Coast 2050 Plan (Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority 1998) regions and five inland regions based on the Louisiana Department of Environmental Quality (LDEQ) defined watersheds (LDEQ 2000). For each region, an individual RRP will be produced. Each RRP will identify the trust resources and services that could potentially be affected by an incident and the restoration projects that have been identified to date for implementation within that region. The Region 2 RRP is the first of those plans to be developed. Establishing regions also provides an administrative tool to, among other things, facilitate tracking of cases, settlement accounting, restoration, and monitoring.

Summary of Program Benefits

The Louisiana Regional Restoration Planning Program, including the RRP's, is intended to benefit the public, industry, and natural resource trustees by:

- ◆ Providing greater opportunities to restore injuries to trust resources and services;
- ◆ Expediting restoration of injured trust resources and services from incidents;
- ◆ Reducing the cost of restoration planning and implementation;
- ◆ Pooling of individual case recoveries to maximize opportunities for implementation of larger, more ecologically significant restoration projects;

- ◆ Providing for more consistency and predictability by describing in detail the NRDA process, thereby increasing the understanding of that process by the public and industry;
- ◆ Improving coordination between restoration activities under the NRDA mandates and other restoration efforts in the state;
- ◆ Enhancing the capability for trustees to restore trust resources and services injured by incidents for which there is no viable Responsible Party;
- ◆ Maximizing opportunities for partnering among Responsible Parties, trustees, and other public and private restoration efforts; and
- ◆ Increasing opportunity for public participation in the NRDA process through pre-incident planning.

The trustees will periodically review the implementation of the Louisiana Regional Restoration Planning Program in the context of the benefits described above, in order to identify opportunities for improvement. In addition, the trustees are committed to identifying, developing, and using innovative operational tools and methods that will achieve the intended benefits of the Louisiana Regional Restoration Planning Program.

CHAPTER 2 REGION 2 - DESCRIPTION

This chapter describes the geographic boundaries, environment, and resources in Region 2.

Region 2 Boundaries

Region 2 encompasses the Breton Sound and Barataria hydrologic basins and the lower Mississippi River basin, delta plain, and modern Balize (Birdfoot) delta. Bordered to the north by the headwaters of Bayou Lafourche and the Mississippi River, Region 2 extends south to the Caminada-Moreau Headland, Plaquemines barrier system, and Birdfoot delta, and from Bayou Lafourche along its western border to the Mississippi River and Mississippi River Gulf Outlet along its eastern border. The following parishes are located either partly or completely within Region 2: Ascension, Assumption, Jefferson, Lafourche, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, and St. John the Baptist.

Affected Environment and Resources

A summary description of the environment and resources that may be impacted by the implementation of the Louisiana Regional Restoration Planning Program in Region 2 is provided below.

Physical Environment

Coastal Louisiana, which includes Region 2, has been formed over the last 7,500 years and is the result of delta formations. The modern deltaic coastal plain is experiencing land loss on the order of 25 to 30 square miles of marsh each year⁵ due to the combined effects of levee construction, subsidence, and associated hydrologic changes (Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority 1998). Region 2 is comprised primarily of Alluvial soils and Gulf Coast marsh soils, as described by Johnson and Yodis (1998). The Mississippi River runs through or adjacent to Ascension, St. Bernard, St. James, St. John the Baptist, St. Charles, Jefferson, Orleans, and Plaquemines parishes.

Region 2 ground water is primarily contained within the Chicot Equivalent Aquifer System (Stuart *et al.* 1994). Region 2 encompasses the Breton Sound and Barataria hydrologic basins and the lower Mississippi River basin, delta plain, and modern Balize (Birdfoot) delta. The surface waters in Region 2 range from fresh to saline.

Biological Resources

As Figure 2, *Region 2 Boundary, Parishes, and Associated Habitat Types*, illustrates, Region 2 habitats are dominated by coastal herbaceous wetlands (*i.e.*, fresh, intermediate, brackish, and salt marsh) and open waters in the seaward areas, while forested wetlands with some agricultural cropland/grassland and upland vegetated habitat occur in the interior portions of the

⁵ The estimate of 25-30 square miles of land lost per year is a historic average rate of loss for the combined periods of 1978-2000 (Barras *et al.* 2003).

Region. The following habitat types are present in Region 2 (detailed descriptions of each are provided in the Louisiana Regional Restoration Planning Program FPEIS [NOAA *et al.* 2007]):

- ◆ Marsh (Salt, Brackish/Intermediate, Flotant, and Fresh);
- ◆ Wetland Forest (Evergreen, Deciduous, and Mixed);
- ◆ Wetland Scrub/Shrub (Evergreen, Deciduous, and Mixed);
- ◆ Agriculture-Cropland-Grassland;
- ◆ Wetland Barren;
- ◆ Open Water;
- ◆ Marine/Estuarine Shore;
- ◆ Freshwater Shore;
- ◆ Marine/Estuarine and Freshwater Benthic (Soft-Sedimentary);
- ◆ Marine/Estuarine Encrusting Community (Natural/Artificial Substrates);
- ◆ Living Reefs;
- ◆ Marine/Estuarine Submerged Aquatic Vegetation (SAV);
- ◆ Mangrove Swamp;
- ◆ Batture;
- ◆ Upland Forest; and
- ◆ Upland Scrub/Shrub (Evergreen, Deciduous, and Mixed).

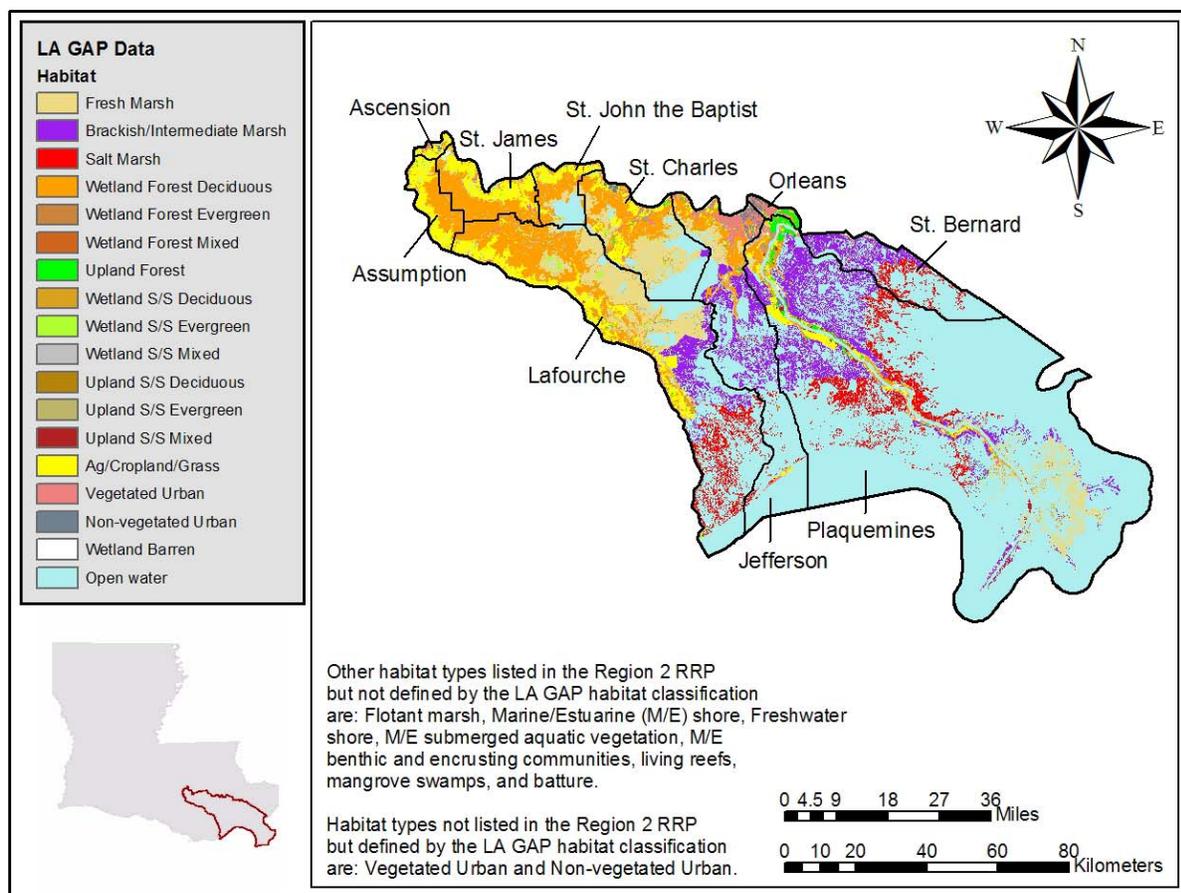


Figure 2: Region 2 Boundary, Parishes, and Associated Habitat Types (adapted from Hartley et al. 2000)

Common biota associated with these habitat types are summarized in Appendix A, *Common Biota and Associated Habitat Types in Region 2* (Vegetation, Table A-1; Mammals, Table A-2; Reptiles and Amphibians, Table A-3; Birds, Table A-4 through Table A-9; Fish and Shellfish, Table A-10). Detailed descriptions of wildlife species associated with these habitat types are also described in the Louisiana Regional Restoration Planning Program FPEIS (NOAA *et al.* 2007).

The Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority (1998), as part of their Coast 2050 plan, identified 21 wildlife species and species groups that rely on the habitats in Region 2 for all or part of the year. These include wading birds, seabirds and shorebirds, raptors, woodland residents including various birds and mammals, and the American alligator.

As of March 2004, the published list of threatened and endangered species for the State of Louisiana includes 32 animal and three plant species (U.S. Department of the Interior, [USDO] 2004). The following 12 threatened and endangered animal species are found in Region 2 (see Table A-11, *Threatened and Endangered Species in Region 2 and their Associated Habitats*): inflated heelsplitter (*Potamilus inflatus*); bald eagle (*Haliaeetus leucocephalus*); brown pelican (*Pelecanus occidentalis*); piping plover (*Charadrius melodus*); green sea turtle (*Chelonia mydas*); hawksbill sea turtle (*Eretmochelys imbricata*); Kemp's (Atlantic) ridley sea turtle (*Lepidochelys kempii*); leatherback sea turtle (*Dermochelys coriacea*); loggerhead sea turtle (*Caretta caretta*); Gulf sturgeon (*Acipenser oxyrinchus desotoi*); pallid sturgeon (*Scaphirhynchus albus*); and West Indian manatee (*Trichechus manatus*). Critical habitat has been designated for the piping plover and Gulf sturgeon. There are no endangered plants identified in Region 2.

Socioeconomic Resources

Infrastructure within Region 2 includes 13 highways (that pass through or border the region), 77 miles of primary roads, 322 miles of secondary roads, 2,631 miles of tertiary roads, and approximately 218 miles of railroads (Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority 1998). Major bridges within or adjacent to Region 2 include the Sunshine Bridge, the bridge at I-310, the Huey P. Long Bridge, and the Crescent City Connection. In addition, smaller crossings over Bayou Lafourche include, but are not limited to, bridges at Rita, Raceland, Thibodaux, Freetown, and Plattenville. There are numerous private helipads in Region 2, and the nearest public heliport is located just north of Region 2 at the Louis Armstrong New Orleans International Airport. In addition, there are numerous sea planes available in the Region to rent from private companies. Commercial and recreational ports located either within or adjacent (when noted) to Region 2 include:

- ◆ Port Fourchon;
- ◆ New Orleans (adjacent);
- ◆ Braithwaite;
- ◆ LaPlace (adjacent);
- ◆ Grand Isle;
- ◆ Metairie (adjacent);
- ◆ Empire-Venice port;
- ◆ Delacroix port;
- ◆ Grand Isle port; and
- ◆ Lafitte port.

The Gulf Intracoastal Waterway, a critical shallow-draft transportation link, traverses Region 2. In addition, the Bayou Segnette Waterway, South Pass Channel, U.S. Army Corps of Engineers (USACE) maintained Barataria Bay Waterway, and the waterway from Empire to the Gulf of Mexico traverse Region 2. The Mississippi River main stem levee system, comprised of levees, floodwalls, and various control structures, traverses Region 2.

The inland waters, coastal marshes, and offshore waters of Region 2 support commercial fishing and aquaculture industries. There is little forest industry in Region 2. Sugarcane, citrus, and commercial fruits and vegetables are important agricultural products. Animal furs and alligator skins are also important commodities in Region 2.

Oil and gas production is important in the region. There are more than 1,500 miles of oil and gas pipelines and more than 15,000 oil and gas wells located within Region 2 (Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority 1998). The Louisiana Offshore Oil Port (LOOP), which provides deepwater tanker offloading and temporary storage of crude oil, has a pipeline that delivers product onshore through Barataria Bay to Clovelly Farms. The LOOP receives approximately 13% of the United States' imported crude oil. Onshore salt domes located near Galliano have a 40 million barrel capacity to receive oil from the LOOP terminal (LA 1 Coalition 2003).

Region 2 has both State and National Parks that provide for the recreational use and/or preservation of natural and cultural resources. Bayou Segnette and Grand Isle State Parks are both located in Jefferson Parish. Jean Lafitte National Historic Park and Preserve, operated by the National Park Service, is located in Orleans Parish. In addition, residents of, and visitors to, Region 2 take advantage of the numerous habitat types and wildlife and fisheries resources, which provide opportunities for wildlife viewing, hunting, fishing, boating, swimming, hiking, biking, camping, and picnicking. Tourism in Region 2 is a multibillion dollar industry (Louisiana Department of Culture, Recreation, and Tourism 2005). Within Region 2, the Louisiana Department of Wildlife and Fisheries (LDWF) manages the four Wildlife Management Areas (WMAs) of Salvador/Timken, Wisner, Maurepas, and Pass-a-Loutre. The U.S. Fish and Wildlife Service (USFWS) manages the Delta and Breton National Wildlife Refuges. Bayou Des Allemands borders Lafourche and St. Charles Parishes and is a state-designated scenic river.

CHAPTER 3 REGIONAL RESTORATION PLAN

The Region 2 RRP is made up of the following components: 1) an identification of “potentially injured trust resources and services”; 2) an identification of one or more restoration types appropriate for each of the “potentially injured trust resources and services” in Region 2; 3) restoration projects in Region 2 that have been identified for this RRP⁶; and 4) the criteria for selecting restoration types and restoration projects during a NRDA for a given incident. These components are described below with references to the Louisiana Regional Restoration Planning Program FPEIS (NOAA *et al.* 2007) and appendices in this document as appropriate.

Potentially Injured Trust Resources and Services

As described in the Louisiana Regional Restoration Planning Program FPEIS (NOAA *et al.* 2007), the Louisiana Regional Restoration Planning Program defines those trust resources and services in Louisiana that are likely to be or are anticipated to be injured (*i.e.*, at-risk) by incidents as “potentially injured trust resources and services.” Pre-identification of these “potentially injured trust resources and services” will facilitate the development of the RRP and assist in the coordination of response activities by informing agency personnel who are participating in the incident response (*i.e.*, cleanup) of trust resources that may be of greatest concern to the trustees. The “potentially injured trust resources and services” in Region 2 are defined under three broad categories: coastal, inland, and regionwide.

The following describes the “potentially injured trust resources and services” found in Region 2⁷.

Coastal

Herbaceous Wetlands

Herbaceous wetlands are primarily salt, brackish/intermediate, and fresh marshes located in or near the coastal zone and alluvial basin. The marshes of the Mississippi River delta complex and other similar areas in Louisiana support a mix of freshwater, estuarine, and marine species. These wetlands are vital habitat for various fish, mammals, and resident and migratory birds. As considered here, this category includes marsh plants and the invertebrates, bacteria, algae, and sediments associated with the vegetation that contribute to all marsh habitat functions.

Forested Wetlands

Forested wetlands are wetland areas dominated by woody vegetation. They usually consist of an overstory of large trees, an understory of young trees or shrubs, and an herbaceous layer. As considered here, this category includes the trees, understory vegetation, soils, closely associated invertebrates, and the services that this habitat provides to other trust resources.

⁶ Trustees are not strictly limited to the selection of projects contained in this RRP, but may consider other restoration projects as appropriate.

⁷ The list under the *Biological Resources* Section of Chapter 2, *Region 2 – Description*, identifies habitat types in Region 2. The list provided in this section and in the header of Figures 3, *Coastal Restoration Types by Trust Resources and Services*, and 4, *Inland Restoration Types by Trust Resources and Services*, is “potentially injured trust resources and services” (which includes, but is not limited to, habitat).

Beaches/Shorelines/Streambeds

Unvegetated beaches and shorelines in coastal waters include the perimeters of headlands, barrier islands, estuaries and bays, tidal mudflats, and river deltas. This zone begins at the lowest part of the intertidal zone and extends into the supratidal zone. As considered here, this injury category includes the invertebrates that burrow and/or live in this habitat. It encompasses all ecological functions performed by this habitat, including, among others, primary production by benthic diatoms in the intertidal zone and secondary production by grazers, but does not include human recreational services.

Streambeds include all wetlands and water channels, which are defined by Langbein and Iseri (1960) as natural or artificial open conduits either naturally or artificially that periodically or continuously contain moving water, or that form a connecting link between two bodies of standing water. Streambeds containing flowing water include: seasonally flooded, temporarily flooded, intermittently flooded, irregularly exposed, regularly flooded, irregularly flooded, seasonal-tidal, or temporary-tidal water regimes (Cowardin *et al.* 1979). As considered here, this injury category includes the substrate (soils/sediments and hard surfaces) and closely associated invertebrates, and includes all ecological functions performed by this habitat (Cowardin *et al.* 1979).

Oyster Reefs (and Other Reefs)

This category considers living reefs in marine and estuarine waters. As considered here, living reefs encompass oysters, mussels, and/or other benthic organisms that contribute to the reef structure, and the fauna and flora that attach to or are closely associated with these reefs. It also includes all ecological services this habitat provides to other trust resources.

Water Column Organisms

As considered here, this category consists of planktonic (*i.e.*, drifting) (including larval fish) and nektonic (*i.e.*, swimming) organisms in marine and estuarine waters, and the ecological services these organisms provide to other trust resources. It also includes large mobile crustaceans, such as crabs and shrimp, and demersal fishes which live on or near the seafloor.

Inland

Herbaceous Wetlands

Inland herbaceous wetlands are those environments that experience periodic flooding and are comprised of emergent vegetation having little or no woody tissue. This definition refers specifically to the inland geographic areas where freshwater flow regimes prevail throughout the year and saltwater does not typically penetrate from the coast. These wetlands support a diverse group of fish, invertebrates, reptiles, amphibians, birds, and mammals. As considered here, this category includes marsh plants and the invertebrates, bacteria, algae, and sediments associated with the vegetation that contribute to marsh habitat functions.

Forested Wetlands

Forested wetlands are characterized by woody vegetation that is at least 18.5 feet tall. They occur in freshwater systems and normally possess an overstory of tall/mature trees, an understory of young trees or shrubs, and an herbaceous layer. Specific examples of this habitat in Louisiana are wetland forest (evergreen, deciduous, and mixed) and swamp. As considered here, this category includes the trees, understory vegetation, soils, closely associated invertebrates, and the services that this habitat provides to other trust resources.

Beaches/Shorelines/Streambeds

Unvegetated beaches and shorelines in fresh waters include, but are not limited to, lakefronts, pond shores, mudflats, and riverbanks. As considered here, this injury category includes the invertebrates that burrow and/or live in this habitat. It encompasses all ecological functions performed by this habitat, including, among others, primary production by benthic algae in the nearshore/limnetic zone and secondary production by grazers, but does not include human recreational services.

Streambeds include all water channels and wetlands contained within the intermittent subsystem of the riverine system. Water regimes are restricted to irregularly exposed, regularly flooded, irregularly flooded, seasonally flooded, temporarily flooded, and intermittently flooded (Cowardin *et al.* 1979). As considered here, this injury category includes the substrate (soils/sediments and rocks) and closely associated invertebrates, and includes all ecological functions performed by this habitat (Cowardin *et al.* 1979).

Upland Vegetation

As defined in the Louisiana Geographic Approach to Planning GAP analysis program (United States Geological Survey [USGS] 2001), this category includes agricultural-cropland-grassland, upland scrub/shrub (deciduous, evergreen, and mixed), and upland forest (deciduous, evergreen, and mixed). It encompasses trees, as well as, understory vegetation, soils, and invertebrates in the soil or associated with plants, and the services this habitat provides to other trust resources.

Water Column Organisms

As considered here, this category consists of both planktonic (including larval fish) and nektonic organisms, such as fish that live in fresh waters streams, ponds, swamps, and lakes. It also includes the ecological services these organisms provide to other trust resources.

Regionwide (Coastal/Inland)

Birds

Common resident and migratory birds that are found in coastal and inland areas of Region 2, and tables describing habitat use by season, are listed in Appendix A, *Common Biota and Associated Habitat Types in Region 2*, Tables A-4 through A-9. This category may also include the ecological services these organisms provide to other trust resources.

Wildlife

Common mammals, reptiles, and amphibians from all habitats in Region 2 are listed in Appendix A, *Common Biota and Associated Habitat Types in Region 2*, Table A-2, *Common Mammals in Region 2 and their Associated Habitats*, and Table A-3, *Common Reptiles and Amphibians in Region 2 and their Associated Habitats*, and are included in this category. This injury category can also include the ecological services these organisms provide to other trust resources.

Recreational Resource Services

Human recreational services are provided by habitats and/or areas throughout Region 2. Indirect activities (*e.g.*, hiking, biking, picnicking, or jogging) and direct activities (*e.g.*, bird and wildlife viewing, hunting, fishing, boating, or swimming) all take place in Region 2 and therefore are included in this category. This category does not, however, include the resources themselves that are involved in the activity.

Cultural Resource Services

Cultural resource services is a broad term that includes prehistoric, historic, architectural, and traditional cultural services that flow from natural resources that have cultural attributes. Cultural resources in Louisiana include lands, buildings, monuments, travel routes, ship wrecks, burial sites, ceremonial sites, battle grounds, Indian mounds, middens, and other artifacts, generally in excess of 50 years of age, that represent the history and culture of the region as perceived by the public or cultural scientists. While all state and local historic preservation groups may contribute to the list of state cultural resource sites or attributes, the Louisiana State Preservation Office, state Indian tribes, and USDOJ are primarily responsible for designating Louisiana's cultural resource sites and attributes. Biological resources can have cultural significance and values under specific conditions. The loss or injury of a biological resource that has cultural significance and value would constitute not only a natural resource injury, but a loss of cultural resource services as well. Therefore this category includes all cultural resource services that natural resources in the state may provide.

Restoration Types

In accordance with OPA and OSPRA, trustees must restore, replace or acquire the equivalent of the injured resource or lost trust services. To ensure that the Louisiana Regional Restoration Planning Program efficiently satisfies this mandate, the trustees: 1) conducted a nexus analysis to identify one or more appropriate restoration types for each of the "potentially injured trust resources and services" in the region; 2) developed restoration type screening criteria to assist in the selection of the most appropriate restoration type(s) to restore trust resources and services injured during a given incident; and 3) developed screening criteria to aid in selecting the most appropriate restoration project(s) for a given incident.

Detailed results and descriptions of the nexus analyses are presented in Section 4.2.4.1, *Nexus Analysis*, of the Louisiana Regional Restoration Planning Program FPEIS (NOAA *et al.* 2007), and are summarized in Figure 3, *Coastal Restoration Types by Trust Resources and Services*, and Figure 4, *Inland Restoration Types by Trust Resources and Services*, excerpted from the Louisiana Regional Restoration Planning Program FPEIS. As shown in the figures below, the restoration types identified for Region 2 include the following seven broad categories (see Section 4.2.3, *Restoration Types*, of the Louisiana Regional Restoration Planning Program FPEIS for a detailed description [NOAA *et al.* 2007]):

- ◆ Creation / Enhancement of Habitat;
- ◆ Physical Protection of Habitat;
- ◆ Acquisition / Legal Protection of Resources and Services;
- ◆ Stocking of Fauna;
- ◆ Physical Protection of Fauna;
- ◆ Restoration of Recreational Resource Services; and
- ◆ Restoration of Cultural Resource Services.

COASTAL			POTENTIALLY INJURED TRUST RESOURCES AND SERVICES							
			Herbaceous Wetlands	Forested Wetlands	Beaches/Shorelines/Streambeds	Oyster Reefs (and Other Reefs)	Water Column Org.	Birds	Wildlife	Recreation
RESTORATION TYPES	Creation/ Enhancement of Habitat	Coastal Herbaceous Wetlands	√	√		√	√	√	√	
		Coastal Forested Wetlands	√	√			√	√	√	
		Coastal Beaches/Shorelines/Streambeds			√		√	√	√	
		Coastal Oyster Reefs (and Other Reefs)				√	√	√	√	
		Coastal SAV	√			√	√	√	√	
	Physical Protection of Habitat	Coastal Herbaceous Wetlands	√	√		√	√	√	√	
		Coastal Forested Wetlands	√	√			√	√	√	
		Coastal Beaches/Shorelines/Streambeds			√		√	√	√	
	Acquisition/ Legal Protection of Habitat	Coastal Herbaceous Wetlands	√	√		√	√	√	√	
		Coastal Forested Wetlands	√	√			√	√	√	
		Coastal Beaches/Shorelines/Streambeds			√		√	√	√	
		Coastal Oyster Reefs (and Other Reefs)				√	√	√	√	
		Coastal SAV	√				√	√	√	
	Stocking of Fauna	Coastal Water Column Org.					√			√
		Coastal Oyster Reefs and Other Reef Organisms				√	√			√
		Birds						√		√
		Wildlife							√	√
	Physical Protection of Fauna	Birds						√		√
		Wildlife							√	√
	Recreational Resource Services									√
Cultural Resource Services									√	

Figure 3: Coastal Restoration Types by Trust Resources and Services (NOAA et al. 2007)

Restoration Type Selection Criteria

As described in Section 4.2.4.1.5, *Restoration Type Selection Criteria*, of the Louisiana Regional Restoration Planning Program FPEIS (NOAA et al. 2007), the trustees have developed restoration type selection criteria to assist in determining which of the various restoration types are most appropriate to restore the trust resources and services injured during a given incident.

		INLAND	POTENTIALLY INJURED TRUST RESOURCES AND SERVICES								
			Herbaceous Wetlands	Forested Wetlands	Beaches/Shorelines/Streambeds	Upland Vegetation	Water Column Org.	Birds	Wildlife	Recreation	Cultural
RESTORATION TYPES	Creation/ Enhancement of Habitat	Inland Herbaceous Wetlands	√				√	√	√	√	
		Inland Forested Wetlands		√			√	√	√	√	
		Inland Beaches/Shorelines/Streambeds			√		√	√	√	√	
		Inland Upland Vegetation				√	√	√	√	√	
	Physical Protection of Habitat	Inland Herbaceous Wetlands	√				√	√	√	√	
		Inland Forested Wetlands		√			√	√	√	√	
		Inland Beaches/Shorelines/Streambeds			√		√	√	√	√	
		Inland Upland Vegetation				√	√	√	√	√	
	Acquisition/ Legal Protection of Habitat	Inland Herbaceous Wetlands	√				√	√	√	√	
		Inland Forested Wetlands		√			√	√	√	√	
		Inland Beaches/Shorelines/Streambeds			√		√	√	√	√	
		Inland Upland Vegetation				√	√	√	√	√	
	Stocking of Fauna	Inland Water Column Org.					√			√	
		Birds						√		√	
		Wildlife							√	√	
	Physical Protection of Fauna	Birds						√		√	
Wildlife								√	√		
Recreational Resource Services									√		
Cultural Resource Services										√	

Figure 4: Inland Restoration Types by Trust Resources and Services (NOAA et al. 2007)

These restoration type selection criteria are based in part on the OPA regulations, Section 990.54(a)(1-6), and include (see Section 4.2.4.1.5, *Restoration Type Selection Criteria*, of the Louisiana Regional Restoration Planning Program FPEIS (NOAA et al. 2007) for definitions):

- ◆ Strength of Nexus to the Injury;
- ◆ Scalability;
- ◆ Degree to Which Restoration Type Addresses Multiple Injuries;
- ◆ Availability of Projects for this Restoration Type in RRP; and
- ◆ Other Case Specific Parameters.

Project Selection Screening Criteria

The trustees will select the appropriate restoration types, conduct initial scaling, and select a set of potential project alternatives (including a preferred alternative), and provide the Draft Restoration Plan to the public for review under OPA, OSPRA, NEPA, and other applicable statutes and regulations. In order to provide consistency, predictability, and accountability in this phase of the NRDA decision-making process, the trustees established project selection screening criteria to assist in selecting the preferred restoration project(s).

These project selection screening criteria are based in part on the OPA regulations, Section 990.54(a)(1-6), as described in Section 4.2.4.2, *Project Selection Screening Criteria*, of the Louisiana Regional Restoration Planning Program FPEIS (NOAA et al. 2007). These include:

- ◆ Project Cost-Effectiveness (including ability to partner);
- ◆ Proximity to Affected Area;
- ◆ Scalability;
- ◆ Extent of Benefit to Injured Trust Resources and Services;
- ◆ Technical Feasibility and Likelihood of Success;
- ◆ Avoidance of Future Additional Injury Resulting from Project;
- ◆ Degree to Which Project Addresses Multiple Injuries;
- ◆ Degree to Which Project Affects Public Health and Safety;
- ◆ Ability to Implement Project with Minimal Delay;
- ◆ Degree to Which Project Supports Existing Strategies/Plans;
- ◆ Project Urgency; and
- ◆ Other Factors as Appropriate.

A Final Restoration Plan will be issued for public comment prior to implementing the selected restoration project(s).

Special Circumstances

If an incident occurs that affects trust resources and services in more than one RRP region, the trustees may select a restoration project(s) in any of the affected regions. In other cases, the trustees may find that in applying the restoration type and/or project selection screening criteria, the most appropriate restoration project(s) for an incident in one region is located outside that region. In both cases, in accordance with the law, regulation, and criteria above, the trustees will select the restoration project(s) that will provide the closest nexus between the injuries and restoration in the most cost-effective manner.

Restoration Projects in Plan

Each region-specific RRP includes a list of restoration projects identified to date in that region. These project lists are not intended to be final, and will be periodically updated as appropriate projects are identified for inclusion. Further, trustees are not strictly limited to selecting projects contained in the lists, but rather can refer to the project lists as tools for expediting settlements. The projects were identified through a two-step process: 1) projects were solicited from the public, government agencies, and industry; and 2) restoration projects that were submitted were reviewed relative to the criteria for incorporation into the RRP as defined in the Section 4.2.1, *Regional Restoration Plans*, of the Louisiana Regional Restoration Planning Program FPEIS (NOAA et al. 2007).

RRP Project Solicitation

Solicitation of projects for inclusion in the Louisiana Regional Restoration Planning Program regional plans began during the informal scoping meetings conducted in October 2000 through Spring 2001. Project solicitation will continue as an ongoing process and the projects lists will be updated as additional projects are identified.

In June 2001, the *Louisiana's Proposed Regional Restoration Planning Program, Public Review Document (PRD)* was finalized and the formal scoping of the Louisiana Regional Restoration Planning Program and project solicitation began. Over 1000 copies of the PRD were distributed to the public and affected parties on or before July 2, 2001. Each PRD disseminated included a NRDA Restoration Project Information Sheet (see Appendix B, *NRDA Restoration Project Information Sheet*) and directions for public and private groups to submit projects to be considered for implementation. Six public meetings were held throughout the State of Louisiana in July 2001 (see Section 9.3, *Formal Scoping*, of the Louisiana Regional Restoration Planning Program FPEIS [NOAA et al. 2007]).

In addition to the six public meetings, 16 additional project solicitation meetings were conducted prior to release of the Draft RRP for Region 2 in September of 2003 (see Table 1, *Project Solicitation Meetings for Region 2 RRP*).

Table 1: Project Solicitation Meetings for Region 2 RRP

Organization	Event	Date
Louisiana Department of Natural Resources/Coastal Management Division - Coastal Zone Management	Quarterly Parish Meeting	05/22/2002
Lafourche Parish	CZM Advisory Committee	07/16/2002
St. James Parish	CZM Advisory Committee	07/31/2002
Barataria-Terrebonne National Estuary Program	Informal Meeting	08/13/2002
St. Charles Parish	Informal Meeting	08/23/2002
Ascension Parish	Informal Meeting	08/26/2002
Inter-Tribal Council	Informal Meeting	08/27/2002
Ducks Unlimited	Informal Meeting	08/28/2002
Jefferson Parish	Informal Meeting	08/29/2002
U.S. Department of Agriculture/Natural Resources Conservation Service	Informal Meeting	09/16/2002
Plaquemines Parish	CZM Advisory Committee	09/17/2002
Lafourche Basin Levee District	Board of Commissioners	10/08/2002
Lafourche Basin Levee District	Board of Commissioners	11/27/2002
Louisiana Department of Wildlife and Fisheries	Informal Meeting	02/25/2003
Louisiana Department of Natural Resources/Dedicated Dredge Program	Informal Meeting	04/30/2003
Louisiana Department of Natural Resources/Coastal Restoration Division	Informal Meeting	06/10/2003

Region 2 RRP Restoration Project Selection

As of June 30, 2003, 124⁸ projects were received for the Region 2 RRP. A group of state and federal trustees reviewed each submitted project relative to the criteria for incorporation into the RRP as defined in Section 4.2.1, *Regional Restoration Plans*, of the Louisiana Regional Restoration Planning Program FPEIS (NOAA et al. 2007). If a project did not meet all of the criteria, it was not included in the Region 2 RRP. Table C-1, *Region 2 RRP Accepted Restoration Projects*, lists the projects that have met the screening criteria for inclusion in the Region 2 RRP. Table C-2, *Region 2 RRP Restoration Projects Not Included*, lists projects that have not met the screening criteria for inclusion in the Region 2 RRP.

Settlement Calculation

The Louisiana Regional Restoration Planning Program describes a number of additional settlement alternatives to assist the trustees and Responsible Parties in negotiations to resolve the Responsible Party's natural resource damage liability for incidents. As a requirement of settlement the Responsible Party(s) or the trustees will be implementing a restoration project(s) to compensate for the injured trust resources and services lost as a result of an incident. These settlement alternatives are described in detail in Section 4.2.6, *Settlement Alternatives*, of the Louisiana Regional Restoration Planning Program FPEIS (NOAA et al. 2007).

Regardless of the specific settlement alternatives selected to restore the injured trust resources and services lost from a given incident, the financial responsibilities of the Responsible Party include: the costs associated with injury assessment, project planning (e.g., site selection, feasibility analyses, engineering and design, permitting, and conservation easements), project implementation, monitoring, operations and maintenance, trustee oversight and administrative costs, corrective actions, contingencies, and any other project-related costs that may foreseeably arise throughout the life of the project. Under each settlement alternative, a Consent Decree or other binding settlement document will be required to provide a Responsible Party with a release from liability.

Responsible Party-Implemented Restoration Project

If a Responsible Party chooses to implement a restoration project itself or through a contracted third party, the settlement calculation will consist primarily of the cost associated with the trustees' costs to conduct the injury assessment and restoration planning, and the required trustee oversight and administrative costs for the life of the project. Costs associated with the implementation of the project, monitoring, operations and maintenance, potential corrective actions, and contingencies would remain the responsibility of the Responsible Party(s) as part of the settlement, but would not need to be calculated. In the case of multiple Responsible Parties or the implementation of an RRP restoration project with a partnering program or organization, the settlement calculation would take into account what portion of the cost each contributing Responsible Party or program is responsible for. Partnering will not decrease a Responsible Party's liability, but may allow them to take advantage of economies of scale in implementing a larger project, thereby lowering the cost of resolving their specific liabilities.

⁸ The Coastwide Nutria Control Program and the Dedicated Dredge Program submitted project information sheets containing information about the respective programs. However, project-specific information was not provided and these submittals could not be evaluated to include as projects in the Region 2 RRP. Projects submitted by these and other programs will be considered for inclusion in the Region 2 RRP.

Cash Settlement - Project-Specific Cash Settlement

If the Responsible Party(s) provides the trustees with the money to implement a specific restoration project (which was selected by the trustees with input from the Responsible Party(s) and the public (by applying the Louisiana Regional Restoration Planning Program project selection screening criteria), the settlement calculation would include the trustees' assessment costs plus the sum of all costs to conduct the project planning and design, permitting, implementation, monitoring, operation and maintenance, oversight and administration, and contingencies for a specific project that compensates for the direct and interim losses of trust resources and services. If the Responsible Party's liability is less than the full amount of the project, the Responsible Party can pay the trustees based on the percentage of the selected restoration project (e.g., "Responsible Party/Fund CO-OP Settlement" alternative).

Cash Settlement - Non-Project-Specific Cash Settlement [Reserved]

This section is reserved pending determination of feasibility of the development of unit costs for all regions. Therefore, references to the settlement alternative of "Non-Project-Specific Cash Settlement" in the September 2003 Draft RRP for Region 2 have been removed from this Final RRP document. If feasibility of the unit costs across all regions is determined at a later date, this Final RRP may be amended to include this settlement alternative.

RRP Revisions

The Region 2 RRP will be updated through periodic project solicitations and will be revised accordingly (see Appendix B, *NRDA Restoration Project Information Sheet*, for the NRDA Restoration Project Information Sheet). A public review and comment period on revisions to the Region 2 RRP will be provided as needed.

Development Process for the Region 2 RRP

Development of the Region 2 RRP paralleled the development process of the FPEIS as outlined in Chapter 9.0, *Regional Restoration Planning Program Development Process*, of the FPEIS (NOAA et al. 2007). Based on input from the public and further consideration by the Regional Restoration Planning Program Workgroup, the Draft RRP for Region 2 was completed and released for public review pursuant to NEPA on September 17, 2003. A 30-day comment period ending on October 23, 2003 was provided.

All written comments on the Draft RRP for Region 2, a summary of the written comments, and responses are also provided in Appendix G, *Public Comments and Responses*. Based on input from the public during the public comment period and further consideration by the RRP Program Workgroup, the Draft RRP for Region 2 was finalized.

The Administrative Record for the Region 2 RRP is maintained at NOAA in Silver Spring, Maryland and duplicate copies are maintained at LOSCO, Baton Rouge, Louisiana:

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APPENDIX A - COMMON BIOTA AND ASSOCIATED HABITAT TYPES IN REGION 2

Table A- 1: Common Vegetation in Region 2 and their Associated Habitats

Scientific Name	Common Name	Habitats (see Table A-12 for key)
<i>Spartina alterniflora</i>	smooth cordgrass	SM, B/IM
<i>Distichlis spicata</i>	saltgrass	SM, B/IM
<i>Salicornia</i> spp.	glasswort	SM
<i>Juncus roemerianus</i>	black rush	SM
<i>Batis maritime</i>	saltwort	SM
<i>Iva frutescens</i>	shrubby marsh alder	SM, B/IM
<i>Spartina patens</i>	marshhay cordgrass	SM, B/IM
<i>Solidago sempervirens</i>	seaside goldenrod	SM, B/IM
<i>Schoenoplectus</i> spp.	bulrushes, three squares, three corner grass	B/IM, FM
<i>Phragmites</i> spp.	common reeds, roseau cane	B/IM, FM
<i>Baccharis halimifolia</i>	eastern baccharis	B/IM, FM
<i>Cladium jamaicense</i>	saw grass	B/IM, FM
<i>Hydrocotyle</i> spp.	pennyworts	B/IM, FM
<i>Typha</i> spp.	cattails	FM
<i>Zizaniopsis miliacea</i>	giant cutgrass	FM
<i>Panicum hemitomon</i>	maidencane	FM
<i>Juncus effusus</i>	soft-stem rush	FM
<i>Eleocharis</i> spp.	spike-rushes	FM
<i>Pontederia cordata</i>	pickerelweed	FM
<i>Sagittaria</i> spp.	arrowheads	FM
<i>Salix nigra</i>	black willow	FM, WF, B
<i>Quercus</i> spp.	oaks	WF, UF
<i>Liquidambar styraciflua</i>	sweet gum	WF, UF
<i>Sassafras albidum</i>	sassafras	WF, UF
<i>Cornus</i> spp.	dogwoods	WF, UF
<i>Fraxinus</i> spp.	ashes	WF, UF
<i>Acer rubrum</i>	red maple	WF, UF
<i>Nyssa aquatica</i>	tupelo gum	WF
<i>Nyssa biflora</i>	swamp tupelo	WF
<i>Saururus cernuus</i>	lizard's tail	WF
<i>Taxodium distichum</i>	bald cypress	WF
<i>Ulmus americana</i>	American elm	WF
<i>Ilex</i> spp.	holly	WF
<i>Platanus occidentalis</i>	sycamore	WF
<i>Cephalanthus occidentalis</i>	buttonbush	WF
<i>Pinus echinata</i>	short-leaf pine	UF
<i>Pinus taeda</i>	loblolly pine	UF
<i>Carya</i> spp.	hickory	UF
<i>Avicennia germinans</i>	black mangrove	MS
<i>Potamogeton</i> sp.	pondweed	M/ESAV, FSAV
<i>Zostera marina</i>	eel grass	M/ESAV
<i>Vallisneria americana</i>	American eelgrass	M/ESAV
<i>Thalassia testudinum</i>	turtlegrass	M/ESAV
<i>Ceratophyllum demersum</i>	coontail	FSAV
<i>Utricularia</i> spp.	bladder worts	FSAV
<i>Eichhornia crassipes</i>	water hyacinth	FSAV
<i>Alternanthera philoxeroides</i>	alligatorweed	FSAV
<i>Limnobium spongia</i>	American frog-bit	FSAV
<i>Pistia stratiotes</i>	water lettuce	FSAV
<i>Nymphaea odorata</i>	white water lily	FSAV
<i>Hydrilla verticillata</i>	hydrilla	FSAV

Table A- 2: Common Mammals in Region 2 and their Associated Habitats

Scientific Name	Common Name	Habitats (see Table A-12 for key)
<i>Odocoileus virginianus</i>	whitetail deer	B/IM, FM, WF, B, WS/S, UF, A/C/G, US/S, FS
<i>Sylvilagus</i> sp.	swamp rabbit, eastern cottontail	B/IM, FM, WF, B, WS/S, UF, A/C/G, US/S
<i>Myocastor coypus</i>	nutria	B/IM, FM, WF, B, WS/S, FS
<i>Ondatra zibethica</i>	muskkrat	B/IM, FM, WF, B, WS/S, FS
<i>Procyon lotor</i>	raccoon	B/IM, FM, WF, B, WS/S, UF, US/S, FS, M/ES, A/C/G
<i>Sus scrofa</i>	wild boar	FM, WF, B, UF, WS/S, US/S
<i>Reithrodontomys fulvescens</i>	fulvous harvest mouse	SM, B/IM, FM, WF, B, UF, MS, A/C/G, WS/S, US/S, FS, M/ES
<i>Dasypus novemcinctus</i>	armadillo	WF, B, UF, A/C/G, WS/S, US/S
<i>Canis latrans</i>	coyote	UF, A/C/G, WF, B, WS/S, US/S
<i>Lynx rufus</i>	bobcat	WF, B, UF, US/S
<i>Didelphis virginiana</i>	Virginia opossum	WF, B, UF, US/S
<i>Lasiurus borealis</i>	eastern red bat	WF, UF
<i>Sciurus carolinensis</i>	eastern grey squirrel	UF, US/S
<i>Mustela vison</i>	mink	B/IM, FM, FS, M/ES, W
<i>Lutra canadensis</i>	river otter	B/IM, FM, WF, B, WS/S, FS

Table A- 3: Common Reptiles and Amphibians in Region 2 and their Associated Habitats

Scientific Name	Common Name	Habitats (see Table A-12 for key)
<i>Alligator mississippiensis</i>	American alligator	SM, B/IM, FM, WF, B, MS, M/ESAV, FSAV, M/EB, FB
<i>Chelydra serpentina</i>	snapping turtle	B/IM, FM, M/ES, FS, WF, B, M/ESAV, FSAV, M/EB, FB
<i>Sternotherus</i> spp.	musk turtles	FM, FS, WF, B, FSAV, FB
<i>Kinosternon</i> spp.	mud turtles	B/IM, M/ES, FM, FS, WF, B, FSAV, M/ESAV, M/EB, FB
<i>Graptemys pseudogeographicakohnii</i>	Mississippi map turtle	FM, FS, WF, B, FSAV, FB
<i>Malaclemys terrapin</i>	diamondback terrapin	SM, B/IM, M/ES, M/ESAV, M/EB
<i>Deirochelys reticularia</i>	chicken turtle	FM, FS, WF, B, FSAV, FB
<i>Chrysemys picta</i>	painted turtle	FM, FS, WF, B, FSAV, FB
<i>Pseudemys concinna</i>	river cooter (turtle)	FM, FS, WF, B, FSAV, FB
<i>Trachemys scripta</i>	slider (turtle)	FM, FS, WF, B, FSAV, FB
<i>Terrapene</i> spp.	box turtles	WF, B, UF, A/C/G, WS/S, US/S, FS,
<i>Apalone</i> spp.	softshell turtles	FM, FS, WF, B, FSAV, FB
<i>Nerodia</i> spp.	water snakes	SM, B/IM, M/ES, M/ESAV, FM, FS, WF, B, FSAV
<i>Regina</i> spp.	crawfish snakes	FM, FS, WF, B, FSAV, A/C/G, WS/S
<i>Thamnophis</i> spp.	garter, ribbon snakes	FM, FS, WF, B, FSAV, UF, A/C/G, US/S, WS/S
<i>Storeria</i> spp.	redbelly, brown snakes	FM, FS, FSAV, WF, B, UF, A/C/G, US/S, WS/S
<i>Virginia</i> spp.	earth snakes	FM, FS, FSAV, WF, B, UF, A/C/G, US/S, WS/S
<i>Diadophis punctatus</i>	ringneck snake	WF, B, UF, A/C/G, US/S, WS/S, FS
<i>Heterodon platirhinos</i>	eastern hognose snake	WF, B, UF, A/C/G, US/S, WS/S, FS
<i>Opheodrys aestivus</i>	rough green snake	WF, B, UF, A/C/G, US/S, WS/S, FS, FM
<i>Farancia abacura</i>	mud snake	SM, B/IM, M/ES, M/ESAV, FM, FS, WF, B, FSAV
<i>Coluber constrictor</i>	racer (snake)	WF, B, FM, FS, WS/S
<i>Elaphe</i> spp.	rat snakes	UF, A/C/G, WF, B, US/S, WS/S
<i>Lampropeltis</i> spp.	milk snakes, kingsnakes	B/IM, M/ES, FM, FS, WF, B, UF, A/C/G, WS/S, US/S
<i>Agkistrodon piscivorus</i>	cottonmouth (snake)	B/IM, M/ES, FM, FS, WF, B, WS/S
<i>Agkistrodon contortrix</i>	copperhead (snake)	FS, WF, B, US/S, WS/S, A/C/G, UF
<i>Sistrurus miliarius</i>	pigmy rattlesnake	FS, WF, B, WS/S, US/S, A/C/G, UF
<i>Crotalus horridus</i>	timber rattlesnake	FS, WF, B, WS/S, US/S, A/C/G, UF
<i>Scincella lateralis</i>	ground skink	WF, WS/S, UF, B, A/C/G, FS, M/ES, US/S, UB
<i>Hyla</i> spp.	tree frogs	B/IM, M/ES, M/ESAV, FM, FS, FSAV, WF, B, WS/S
<i>Pseudacris</i> spp.	chorus frogs	B/IM, M/ES, M/ESAV, FM, FS, FSAV, WF, B, WS/S, A/C/G
<i>Acris</i> spp.	cricket frogs	B/IM, M/ES, M/ESAV, FM, FS, FSAV, WF, B, WS/S, A/C/G
<i>Rana</i> spp.	true frogs	B/IM, M/ES, M/ESAV, FM, FS, FSAV, WF, B, WS/S, US/S, A/C/G, UF

Table A- 4: Common Birds in Region 2 and their Associated Habitats – Waterfowl and Waterbirds

Scientific Name	Common Name	Season	Habitats (see Table A-12 for key)
<i>Gavia immer</i>	common loon	W	M/ES, FS, M/ESAV, FSAV, W
<i>Podiceps spp.</i>	grebes	W	M/ES, M/ESAV, W
<i>Phalacrocorax auritus</i>	double-crested cormorant	W	M/ES, M/ESAV, FS, FSAV, W
<i>Anhinga anhinga</i>	American anhinga	YR	WF, B, A/C/G, FS, WS/S, W
<i>Chen caerulescens</i>	snow goose	W	M/ES, FS, B/IM, FM, A/C/G, W
<i>Anas fulvigula</i>	mottled duck	YR	B/IM, M/ES, FM, FS, M/ESAV, FSAV, W
<i>Anas strepera</i>	gadwall	W	B/IM, M/ES, FM, FS, M/ESAV, FSAV, W
<i>Anas platyphynchos</i>	mallard	W	B/IM, M/ES, FM, FS, M/ESAV, FSAV, WF, B, WS/S, W
<i>Anus acuta</i>	common pintail	W	SM, B/IM, M/ES, FM, FS, M/ESAV, FSAV, W
<i>Anus americana</i>	American wigeon	W	B/IM, M/ES, FM, FS, M/ESAV, FSAV, A/C/G, W
<i>Aix sponsa</i>	wood duck	YR	WF, WS/S, FS, B, W
<i>Anas clypeata</i>	northern shoveler	W	FM, FS, FSAV, SM, B/IM, M/ES, M/ESAV, W
<i>Anas discors</i>	blue-winged teal	YR	FM, FS, FSAV, W
<i>Anas crecca</i>	green-winged teal	W	M/ES, B/IM, FM, FS, FSAV, W
<i>Aythya valisineria</i>	canvasback	W	SM, B/IM, FM, M/ES, FS, M/ESAV, FSAV, W
<i>Aythya collaris</i>	ring-necked duck	W	WF, WS/S, FS, B, W
<i>Aythya affinis</i>	lesser scaup	W	FS, FSAV, M/ES, W
<i>Bucephala clangula</i>	common goldeneye	W	WF, WS/S, FS, W, B, M/ES
<i>Bucephala albeola</i>	bufflehead	W	FS, FSAV, M/ES, M/ESAV, W
<i>Oxyura jamaicensis</i>	ruddy duck	W	FS, FM, FSAV, M/ES, W
<i>Mergus serrator</i>	red-breasted merganser	W	FS, M/ES, FSAV, W
<i>Gelochelidon nilotica</i>	gull-billed tern	YR	SM, M/ES, WB, A/C/G, W, B/IM
<i>Lophodytes cucullatus</i>	hooded merganser	W, Br	WF, WS/S, B, FS, W
<i>Fulica americana</i>	American coot	W	W, FM, B/IM, FS, M/ES, A/C/G, M/ESAV, FSAV
<i>Gallinula chloropus</i>	common moorhen	YR	W, FM, FS, FSAV
<i>Porphyryla martinica</i>	purple gallinule	Br	W, FM, FS, WF, B, FSAV

* Br = present during breeding season (generally spring and/or summer)
W = present in winter
YR = present year round

Table A- 5: Common Birds in Region 2 and their Associated Habitats – Colonial Nesting Wading Birds

Scientific Name	Common Name	Season	Habitats (see Table A-12 for key)
<i>Ardea herodias</i>	great blue heron	YR	FM, B/IM, SM, WB, FS, M/ES, WF, MS, B, WS/S, W
<i>Egretta caerulea</i>	little blue heron	YR	FM, B/IM, SM, WB, WF, MS, B, WS/S, A/C/G, W, FS, ME/S
<i>Egretta tricolor</i>	tricolored heron	YR	FM, B/IM, SM, WB, WF, MS, B, WS/S, W, FS, ME/S
<i>Casmerodius albus</i>	great egret	YR	FM, B/IM, SM, WB, WF, W, FS, ME/S, WF, FS, M/ES
<i>Egretta thula</i>	snowy egret	YR	FM, B/IM, SM, WB, WF, MS, B, WS/S, W, FS, M/ES
<i>Bubulcus ibis</i>	cattle egret	YR	FM, WB, W, A/C/G, FS
<i>Nycticorax nycticorax</i>	black-crowned night heron	YR	FM, B/IM, SM, WB, WF, MS, B, WS/S, W, FS, M/ES
<i>Nyctanassa violacea</i>	yellow-crowned night heron	Br	FM, B/IM, SM, WB, WF, MS, B, WS/S, W, FS, M/ES
<i>Butorides striatus</i>	green-backed heron	YR	FM, B/IM, SM, WB, WF, MS, B, WS/S, W, FS, M/ES
<i>Ixobrychus exilis</i>	least bittern	Br	FM, FS, W
<i>Botaurus lentiginosus</i>	American bittern	W	FM, FS, W
<i>Eudocimus albus</i>	white ibis	YR	FM, B/IM, SM, WB, WF, MS, B, WS/S, W, FS, M/ES, A/C/G
<i>Rallus</i> spp.	rails	W, Br	FM, B/IM, SM, WB, WF, MS, B, WS/S, W, FS, M/ES
<i>Himantopus mexicanus</i>	black-necked stilt	YR	FM, FS, W, WB
<i>Recurvirostra americana</i>	American avocet	W	M/ES, FS, W
<i>Pluvialis squatarola</i>	black-bellied plover	W	FS, WB, ME/S, W
<i>Arenaria interpres</i>	ruddy turnstone	W	FS, WB, ME/S, W, WS/S
<i>Charadrius semipalmatus</i>	semipalmated plover	W	ME/S
<i>Charadrius wilsonia</i>	Wilson's plover	Br	ME/S
<i>Charadrius vociferous</i>	killdeer	YR	A/C/G, FS, WS/S, W
<i>Philohelo minor</i>	American woodcock	W	WS/S, WF, B
<i>Capella gallinago</i>	common snipe	W	WB, FM, B/IM, A/C/G
<i>Limnodromus griseus</i>	short-billed dowitcher	W	WB, FM, B/IM, FS
<i>Calidris canutus</i>	red knot	W	M/ES, FS
<i>Catoptrophorus semipalmatus</i>	willet	YR	FM, B/IM, SM, M/ES, WB
<i>Tringa melanoleuca</i>	greater yellowlegs	W	FM, WB, FS, W, B, WF, WS/S
<i>Tringa flavipes</i>	lesser yellowlegs	W	FM, WB, FS, W, WF, WS/S, M/ES, B/IM, SM
<i>Calidris alba</i>	sanderling	W	FS, M/ES
<i>Calidris alpina</i>	dunlin	W	WB, M/ES, FS
<i>Actitis macularia</i>	spotted sandpiper	W	WS/S, FS
<i>Calidris minutilla</i>	least sandpiper	W	WB, FM, W, FS
<i>Calidris mauri</i>	western sandpiper	W	WB, M/ES, FS

* Br = present during breeding season (generally spring and/or summer)
W = present in winter
YR = present year round

Table A- 6: Common Birds in Region 2 and their Associated Habitats – Raptors

Scientific Name	Common Name	Season	Habitats (see Table A-12 for key)
<i>Ictinia mississippiensis</i>	Mississippi kite	Br	WF, B, WS/S
<i>Accipiter striatus</i>	sharp-shinned hawk	W	WF, UF, B, WS/S, US/S
<i>Accipiter cooperii</i>	Cooper's hawk	YR	WF, UF, B, WS/S, US/S
<i>Circus cyaneus</i>	northern harrier	W	FM, B/IM, A/C/G
<i>Buteo jamaicensis</i>	red-tailed hawk	YR	A/C/G, WF, B, UF, FM, WS/S
<i>Buteo lineatus</i>	red-shouldered hawk	YR	A/C/G, WF, B, UF, FM, WS/S
<i>Buteo platypterus</i>	broad-winged hawk	Br	WF, UF, B
<i>Haliaeetus leucocephalus</i>	bald eagle	Br	WF, UF
<i>Pandion haliaetus</i>	osprey	YR	WF, FS, M/ES
<i>Cathartes aura</i>	turkey vulture	YR	WF, UF
<i>Coragyps atratus</i>	black vulture	YR	WF, UF
<i>Falco sparverius</i>	American kestrel	W	A/C/G, WF, UF
<i>Falco columbarius</i>	merlin	W	UF, WF, FM, A/C/G
<i>Falco peregrinus</i>	peregrine falcon	W	A/C/G
<i>Otus asio</i>	eastern screech owl	YR	WF, UF, A/C/G, US/S, WS/S, B
<i>Bubo virginianus</i>	great horned owl	YR	WF, UF, WS/S, US/S, A/C/G

* Br = present during breeding season (generally spring and/or summer)
W = present in winter
YR = present year round

Table A- 7: Common Birds in Region 2 and their Associated Habitats – Non-Passerine Land Birds

Scientific Name	Common Name	Season	Habitats (see Table A-12 for key)
<i>Zenaidura macroura</i>	mourning dove	YR	A/C/G, UF, US/S
<i>Coccyzus americanus</i>	yellow-billed cuckoo	Br	UF, US/S, A/C/G
<i>Chordeiles minor</i>	common nighthawk	Br	A/C/G, UF
<i>Archilochus colubris</i>	ruby-throated hummingbird	Br	A/C/G, UF
<i>Megaceryle alcyon</i>	belted kingfisher	W	FS, M/ES, W, FM, B/IM, SM
<i>Melanerpes erythrocephalus</i>	red-headed woodpecker	YR	A/C/G, UF, US/S
<i>Dryocopus pileatus</i>	pileated woodpecker	YR	UF, WF
<i>Colaptes auratus</i>	common flicker	YR	UF, WF, A/C/G
<i>Melanerpes carolinus</i>	red-bellied woodpecker	YR	WF, UF, A/C/G
<i>Sphyrapicus varius</i>	yellow-bellied sapsucker	W	WF, UF,
<i>Picoides pubescens</i>	downy woodpecker	YR	WF, UF, B, WS/S, US/S
<i>Picoides villosus</i>	hairy woodpecker	YR	WF, UF, B, WS/S, US/S

* Br = present during breeding season (generally spring and/or summer)
W = present in winter
YR = present year round

Table A- 8: Common Birds in Region 2 and their Associated Habitats – Seabirds and Gulls

Scientific Name	Common Name	Season	Habitats (see Table A-12 for key)
<i>Pelecanus erythrorhynchos</i>	American white pelican	W	W, FS, M/ES, FM, B/IM
<i>Pelecanus occidentalis</i>	brown pelican	YR, Br	SM, B/IM, FM, FS, M/ES, W
<i>Fregata magnificens</i>	magnificent frigatebird	NBr	SM, M/ES
<i>Morus bassanus</i>	northern gannet	W	M/ES
<i>Larus spp.</i>	gulls	W	SM, B/IM, FM, M/ES, FS, W, A/C/G
<i>Sterna spp.</i>	terns	W, Br	SM, B/IM, FM, WB, W, M/ES, FS
<i>Rynchops niger</i>	black skimmer	YR	SM, B/IM, WB, W, M/ES

* Br = present during breeding season (generally spring and/or summer)
NBr = not a breeder, but present during the breeding season (spring and/or summer)
W = present in winter
YR = present year round

Table A- 9: Common Birds in Region 2 and their Associated Habitats – Passerine Birds

Scientific Name	Common Name	Season	Habitats (see Table A-12 for key)
<i>Tyrannus tyrannus</i>	eastern kingbird	Br	UF, WF, WS/S, A/C/G
<i>Myiarchus crinitus</i>	great crested flycatcher	Br	UF, WF
<i>Empidonax vireescens</i>	acadian flycatcher	Br	UF, WF, B
<i>Anthus spinoletta</i>	water pipit	W	FS, M/ES, A/C/G
<i>Progne subis</i>	purple martin	Br	FS, A/C/G
<i>Hirundo rustica</i>	barn swallow	Br	A/C/G, FM, FS, W
<i>Iridoprocne bicolor</i>	tree swallow	W	A/C/G, FS, WB, FM, WF
<i>Stelgidopteryx ruficollis</i>	rough-winged swallow	Br	FS, WS/S, FM
<i>Corvus ossifragus</i>	fish crow	YR	FS, A/C/G, M/ES
<i>Corvus brachyrhynchos</i>	American crow	YR	UF, WF, A/C/G, WS/S, FS
<i>Cyanocitta cristata</i>	blue jay	YR	UF, A/C/G
<i>Parus carolinensis</i>	Carolina chickadee	YR	UF, A/C/G
<i>Parus bicolor</i>	tufted titmouse	YR	WF, UF, A/C/G
<i>Certhia familiaris</i>	brown creeper	W	WF, UF, WS/S, US/S
<i>Troglodytes aedon</i>	house wren	W	A/C/G, US/S, UF
<i>Thryothorus ludovicianus</i>	Carolina wren	YR	A/C/G, US/S
<i>Cistothorus platensis</i>	sedge wren	W	A/C/G, FM
<i>Regulus satrapa</i>	golden-crowned kinglet	W	UF, WF
<i>Regulus calendula</i>	ruby-crowned kinglet	W	UF, WF
<i>Polioptila caerulea</i>	blue-gray gnatcatcher	YR, Br	UF, WF, US/S, WS/S
<i>Toxostoma rufum</i>	brown thrasher	YR	US/S, WS/S
<i>Dumetella carolinensis</i>	gray catbird	W, YR	US/S, WS/S, A/C/G
<i>Mimus polyglottos</i>	northern mockingbird	YR	US/S, UF, A/C/G
<i>Sialia sialis</i>	eastern bluebird	YR	A/C/G, US/S, WS/S
<i>Turdus migratorius</i>	American robin	W	A/C/G, UF
<i>Bombycilla cedrorum</i>	cedar waxwing	W	UF, WF, US/S, A/C/G
<i>Vireo spp.</i>	vireos	Br, W, YR	UF, US/S, UB
<i>Protonotaria citrea</i>	prothonotary warbler	Br	WF, B, WS/S
<i>Parula americana</i>	northern parula warbler	Br	WF, B
<i>Dendroica coronata</i>	yellow-rumped warbler	W	UF, WF, US/S, WS/S
<i>Dendroica palmarum</i>	palm warbler	W	A/C/G, UF, US/S
<i>Wilsonia pusilla</i>	Wilson's warbler	W	WS/S, B
<i>Wilsonia citrina</i>	hooded warbler	Br	WF, B, WS/S
<i>Geothlypis trichas</i>	common yellowthroat	YR	FW, B, FM, WS/S
<i>Icteria virens</i>	yellow-breasted chat	Br	WS/S, US/S
<i>Agelaius phoeniceus</i>	red-winged blackbird	YR	FM, WF, B, A/C/G, FS, WS/S
<i>Molothrus ater</i>	brown-headed cowbird	YR	A/C/G, WS/S, WF, US/S, UF
<i>Euphagus carolinus</i>	rusty blackbird	W	WS/S, WF, B
<i>Euphagus cyanocephalus</i>	Brewer's blackbird	W	A/C/G
<i>Quiscalus quiscula</i>	common grackle	YR	A/C/G, WS/S
<i>Quiscalus major</i>	boat-tailed grackle	YR	SM, M/ES
<i>Sturnella magna</i>	eastern meadowlark	YR	A/C/G
<i>Sturnus vulgaris</i>	European starling	YR	A/C/G
<i>Icterus spurius</i>	orchard oriole	Br	A/C/G, UF, US/S
<i>Passer domesticus</i>	house sparrow	YR	A/C/G
<i>Cardinalis cardinalis</i>	northern cardinal	YR	A/C/G, UF, US/S
<i>Carduelis tristis</i>	American goldfinch	W, Br	US/S, A/C/G, UF
<i>Passerina cyanea</i>	indigo bunting	Br	A/C/G, US/S
<i>Passerina ciris</i>	painted bunting	Br	US/S, UF, A/C/G
<i>Zonotrichia spp.</i>	sparrows	W	UF, WF, US/S, WS/S, A/C/G, FM, B/IM, SM
<i>Catharus guttatus</i>	hermit thrush	W	UF, WF, US/S, WS/S, A/C/G
<i>Lanius ludovicianus</i>	loggerhead shrike	YR	A/C/G

* Br = present during breeding season (generally spring and/or summer)
W = present in winter
YR = present year round

Table A- 10: Common Fish and Shellfish Species in Region 2 and their Associated Habitats

Scientific Name	Common Name	Habitat (see Table A-12 for key)
<i>Dasyatis sabina</i>	Atlantic stingray	BW, SW
<i>Acipenser oxyrinchus desotoi</i>	Gulf sturgeon	FW, BW, SW
<i>Scaphirhynchus platyrhynchus</i>	shovelnose sturgeon	FW
<i>Polyodon spathula</i>	paddlefish	FW
<i>Lepisosteus oculatus</i>	spotted gar	FW
<i>Lepisosteus platostomus</i>	shortnose gar	FW
<i>Lepisosteus spatula</i>	alligator gar	FW, BW
<i>Amia calva</i>	Bowfin (or choupique)	FW
<i>Elops saurus</i>	ladyfish	BW, SW
<i>Megalops atlanticus</i>	tarpon	SW
<i>Anguilla rostrata</i>	American eel	FW, BW, SW
<i>Myrophis punctatus</i>	speckled worm eel	BW, SW
<i>Brevoortia patronus</i>	Gulf menhaden	BW, SW
<i>Dorosoma cepedianum</i>	gizzard shad	FW, BW
<i>Dorosoma petenense</i>	threadfin shad	FW, BW
<i>Anchoa mitchilli</i>	bay anchovy	BW, SW
<i>Cyprinus carpio</i>	common carp	FW
<i>Hybognathus hayi</i>	cypress minnow	FW
<i>Hybognathus nuchalis</i>	Mississippi silvery minnow	FW
<i>Notemigonus crysoleucas</i>	golden shiner	FW
<i>Notropis</i> spp.	shiners	FW
<i>Phenacobius mirabilis</i>	suckermouth minnow	FW
<i>Pimephales vigilax</i>	bullhead minnow	FW
<i>Carpionodes carpio</i>	river carpsucker	FW
<i>Ictiobus bubalus</i>	smallmouth buffalo	FW
<i>Ictiobus cyprinellus</i>	bigmouth buffalo	FW
<i>Ictiobus niger</i>	black buffalo	FW
<i>Ictalurus furcatus</i>	blue catfish	FW, BW
<i>Ictalurus natalis</i>	yellow bullhead	FW
<i>Ictalurus punctatus</i>	channel catfish	FW
<i>Noturus</i> spp.	madtoms	FW
<i>Pylodictis olivaris</i>	flathead catfish	FW
<i>Mugil cephalus</i>	striped mullet	FW, BW, SW
<i>Fundulus notatus</i>	blackstripe topminnow	FW
<i>Fundulus notti</i>	bayou topminnow	FW
<i>Morone chrysops</i>	white bass	FW
<i>Morone mississippiensis</i>	yellow bass	FW
<i>Morone saxatilis</i>	striped bass	FW, BW, SW
<i>Centrarchus macropterus</i>	flier	FW
<i>Lepomis</i> spp.	hybrid sunfish	FW
<i>Lepomis gulosus</i>	warmouth	FW
<i>Lepomis humilis</i>	orangespotted sunfish	FW
<i>Lepomis macrochirus</i>	bluegill	FW
<i>Lepomis megalotis</i>	longear sunfish	FW
<i>Lepomis microlophus</i>	redecor sunfish	FW
<i>Lepomis punctatus</i>	spotted sunfish	FW
<i>Lepomis symmetricus</i>	bantam sunfish	FW
<i>Micropterus salmoides</i>	largemouth bass	FW
<i>Pomoxis annularis</i>	white crappie	FW
<i>Pomoxis nigromaculatus</i>	black crappie	FW
<i>Caranx hippos</i>	crevalle jack	SW
<i>Trachinotus carolinus</i>	Florida pompano	SW
<i>Lutjanus griseus</i>	gray snapper	SW
<i>Archosargus probatocephalus</i>	sheepshead	BW, SW
<i>Aplodinotus grunniens</i>	freshwater drum	FW

FW = Fresh Water
 BW = Brackish Water
 SW = Saltwater

Table A- 10: Common Fish and Shellfish Species in Region 2 and their Associated Habitats (Continued)

Scientific Name	Common Name	Habitat (see Table A-12 for key)
<i>Bairdiella chrysoura</i>	silver perch	BW, SW
<i>Cynoscion arenarius</i>	sand seatrout	BW, SW
<i>Cynoscion nebulosus</i>	spotted seatrout	BW, SW
<i>Leiostomus xanthurus</i>	spot	BW, SW
<i>Micropogonias undulatus</i>	Atlantic croaker	BW, SW
<i>Menticirrhus americanus</i>	southern kingfish	BW, SW
<i>Pogonias cromis</i>	black drum	BW, SW
<i>Sciaenops ocellatus</i>	red drum (redfish)	BW, SW
<i>Scomberomorus maculatus</i>	Spanish mackerel	SW
<i>Prionotus</i> spp.	searobins	BW, SW
<i>Citharichthys spilopterus</i>	bay whiff	BW, SW
<i>Etopus crossotus</i>	fringed flounder	BW, SW
<i>Paralichthys lethostigma</i>	southern flounder	BW, SW
<i>Trinectes maculatus</i>	hogchoker	BW, SW
<i>Macrobrachium ohione</i>	river shrimp	FW
<i>Palaemonetes</i> spp.	grass shrimp	FW, BW, SW
<i>Penaeus aztecus</i>	brown shrimp	BW, SW
<i>Penaeus duorarum</i>	pink shrimp	BW, SW
<i>Penaeus setiferus</i>	white shrimp	BW, SW
<i>Xiphopenaeus kroyeri</i>	seabob shrimp	SW
<i>Callinectes sapidus</i>	greater blue crab	BW, SW
<i>Callinectes similis</i>	lesser blue crab	BW, SW
<i>Menippe adina</i>	stone crab	BW, SW
<i>Panopeus</i> spp.	mud crabs	BW, SW
<i>Loliginidae</i>	squid	BW, SW
<i>Crassostrea virginica</i>	eastern oyster	BW, SW
<i>Stramonita haemostoma</i>	southern oyster drill	SW
<i>Mercenaria campechiensis</i>	southern quahog clam	SW

FW = Fresh Water
 BW = Brackish Water
 SW = Saltwater

Table A- 11: Threatened and Endangered Species in Region 2 and their Associated Habitats

Scientific Name	Common Name	Habitats (see Table A-12 for key)
<i>Potamilus inflatus</i>	inflated heelsplitter (mussel)	FS, W
<i>Haliaeetus leucocephalus</i>	bald eagle	WF
<i>Pelecanus occidentalis</i>	brown pelican	M/ES, W, MS, WS/S
<i>Charadrius melodus</i>	piping plover*	ME/S, WB
<i>Chelonia mydas</i>	green sea turtle	W, M/ESAV, ME/S
<i>Eretmochelys imbricata</i>	hawksbill sea turtle	W, M/ESAV, ME/S
<i>Lepidochelys kempii</i>	Kemp's (Atlantic) ridley sea turtle	W, M/ESAV, ME/S
<i>Dermochelys coriacea</i>	leatherback sea turtle	W, ME/S
<i>Caretta caretta</i>	loggerhead sea turtle	W, ME/S, M/ESAV, SM
<i>Acipenser oxyrinchus desotoi</i>	Gulf sturgeon*	W
<i>Scaphirhynchus albus</i>	pallid sturgeon	W
<i>Trichechus manatus</i>	West Indian manatee	W

* Note: critical habitat has been designated for these species.

Table A- 12: Key for Habitat Type Abbreviations. All habitat types are found in Region 2 except for upland forest, upland barren, and upland scrub/shrub habitats.

Habitat Type	Abbreviation
Salt Marsh	SM
Brackish/Intermediate Marsh	B/IM
Fresh Marsh	FM
Wetland Forest	WF
Wetland Scrub-Shrub	WS/S
Mangrove Swamp	MS
Upland Forest	UF
Marine/Estuarine SAV	M/ESAV
Freshwater SAV	FSAV
Batture	B
Agriculture-Cropland-Grassland	A/C/G
Freshwater Shore	FS
Marine/Estuarine Shore	M/ES
Upland Scrub/Shrub	US/S
Wetland Barren	WB
Upland Barren	UB
Water	W
Marine/Estuarine Benthic	M/EB
Freshwater Benthic	FB
Marine/Estuarine Encrusting Communities	M/EEC
Living Reefs	LR

APPENDIX B - NRDA RESTORATION PROJECT INFORMATION SHEET

Paperwork Reduction Act Information

**Natural Resource Damage Assessment
Restoration Project Information Sheet**

Responses to this collection are voluntary. Collection of restoration project information will be undertaken in order to provide information to Natural Resource Trustees to develop potential restoration alternatives for natural resource injuries and service losses requiring restoration during the restoration planning phase of the Natural Resource Damage Assessment (NRDA) process. Public reporting burden for this collection of information is estimated to average 20 minutes including the time for reviewing instructions, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing this burden, to the NOAA Fisheries Office of Habitat Conservation, Restoration Division, LSU/LBTC, South Stadium Drive, Baton Rouge, LA 70803.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

The identity of respondents will not remain confidential. The information collected will be reviewed for compliance with the NOAA Section 515 Guidelines established in response to the Treasury and General Government Appropriations Act, and certified before dissemination.

NATURAL RESOURCE DAMAGE ASSESSMENT
RESTORATION PROJECT INFORMATION SHEET

Organization:		Project Name:
Organization Web Page:		Project Location:
Contact Name:		Parish & Watershed:
Contact Title:		Latitude/Longitude:
Contact Address:		
Contact Phone:	Contact Fax:	Contact E-Mail:

Restoration Activity

Resource/Habitat/Service	<input type="checkbox"/> Marine/Estuarine Wetland <input type="checkbox"/> Freshwater Wetland <input type="checkbox"/> Reef <input type="checkbox"/> Biological (Fish, Birds, Wildlife) <input type="checkbox"/> Upland <input type="checkbox"/> Recreational <input type="checkbox"/> _____
Restoration Result	<input type="checkbox"/> Creation <input type="checkbox"/> Rehabilitation <input type="checkbox"/> Enhancement <input type="checkbox"/> Protection <input type="checkbox"/> _____
	Project Size: _____ Affected Area: _____

Project Status (please provide as much information as is currently available)

Activity	Funded?	Completed?	Additional Notes
Planning/Design/Permitting:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	
Property or Resource Acquisition:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	
Construction:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	
Maintenance and Future Activities:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	
Future Construction & Oversight:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	
Restoration Monitoring:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	
Conservation Servitude/Easement		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	
Other (_____):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	

Restoration Description and Benefits

Project Partners

Organization	Contact Information	Project Involvement

Please return this form to the Louisiana Oil Spill Coordinator's Office, Attn: RRP Program Manager, 150 Third Street, Suite 405, Baton Rouge, LA 70801, Fax: (225) 219-5802

NATURAL RESOURCE DAMAGE ASSESSMENT
RESTORATION PROJECT INFORMATION SHEET

Guidelines for Completion

Please complete all of the information requested with the best information that you have available. Limited attachments are acceptable if they are necessary to adequately describe the project, however every effort should be made to have all pertinent information included on the Restoration Project Information Sheet. Below are specific guidelines for completion.

Organization: The name of the organization or agency submitting the information.

Organization Web Page: The web page of the above organization or agency.

Contact Name: The name of a person who can be contacted for additional information.

Contact Title: The title of the above individual.

Contact Address: The mailing address of the above individual.

Phone/Fax/Email: The Phone number, Fax and E-mail of the above individual.

Project Name: The common name of the project, usually a combination of location and restoration activity, for example the Cross Bayou Mangrove Restoration.

Project Location: The location where the restoration activity will take place, for example East Timbalier Island.

Parish & Watershed: The Parish and Watershed where the project will be completed.

Latitude/Longitude: The project location in Degrees/Minutes/Seconds or Decimal Degrees

Resource/Habitat/Service: The type of resource, habitat, and/or service that will be restored.

Restoration Result: The type of activity that will be completed as part of the restoration

Creation: Creation of a habitat, resource, or service in a area where it did not previously exist.

Rehabilitation: The reestablishment or rehabilitation of an area that once provided, but does not currently, the resource, habitat, or service in which you are trying to restore.

Enhancement: The enhancement of an existing resource, habitat, or service.

Preservation/Protection: The removal of a threat to a resource, habitat, or service.

Project Size: The size of the area where restoration activities will be completed.

Affected Area (Size): The size of the area that will be affected by the restoration activity.

Project Status: Please check the appropriate boxes concerning whether certain aspects of the project have funding from an outside source allocated to them, and/or if certain activities have been completed. Additionally if a certain activity is not required for completion of the project check the box "n/a" for not applicable.

Conservation Servitude: Please check the appropriate box indicating whether or not the landowner would be willing to sign a conservation servitude. A conservation servitude or easement is a restriction landowners voluntarily place on specified uses of their property for a predesignated period of time to protect the natural resources on their property while maintaining private ownership. A conservation easement is recorded as a written legal agreement between the landowner and the "holder" of the easement, which may be either a non-profit conservation organization or government agency.

Project Description And Benefits A 1-2 paragraph description of the project and the restoration activities to be completed, along with information on the benefits of this project to public and environment. In addition feel free to attach other information, maps, or diagrams concerning your project.

Project Partners: Please provide the name, contact, and involvement (equipment, matching funds, design, etc.) of other organizations or agencies involved with the restoration activity.

APPENDIX C - REGION 2 RRP RESTORATION PROJECTS

Table C-1: Region 2 RRP Accepted Restoration Projects

RRP Track Code	Project Name	Sponsor Organization(*)	State Project Number	Federal Project Number	Basin	Parish	RRP Restoration Type (**)
R2-5CWP-2001-001	Northeast Extension of Barataria Land Bridge Shoreline Protection	NRCS	BA-27d	BA-24-4	Barataria	Jefferson	PP CHW
R2-5CWP-2001-002	Grand Bayou to Pass Chalant Island Restoration	NMFS	BA-35	BA-21-2	Barataria	Plaquemines	C/E CHW
R2-5CWP-2001-003	Little Lake Shoreline Protection/Dedicated Dredging near Round Lake	NMFS	BA-37	BA-24-1	Barataria	Lafourche	C/E CHW
R2-5CWP-2001-004	Dedicated Dredging in Connection with Existing Barataria Basin Land Bridge	USFWS	BA-36	BA-CW-3	Barataria	Jefferson	C/E CHW
R2-5CWP-2001-013	Bayou Lafourche Diversion	USEPA	BA-25b				C/E CHW
R2-5CWP-2001-014	Pelican Island & Pass La Mer to Chalant Pass	NMFS	BA-38		Barataria	Plaquemines	C/E CHW; C/E CBSS
R2-5CWP-2001-015	Lake Lery Dedicated Dredging	USACE		BS-CW-1	Breton Sound	St. Bernard	C/E CHW; C/E CBSS
R2-5CWP-2001-016	South Shore of the Pen Protection/Dedicated Dredging	USACE		BA-24-3A;B	Barataria	Jefferson	C/E CHW; PP CHW
R2-5CWP-2000-025	Delta Management at Fort St. Phillip	USFWS	BS-11		Breton Sound	Plaquemines	C/E CHW
R2-5CWP-2000-027	Delta-Building Diversion North of Fort St. Phillip	USACE	BS-10		Breton Sound	Plaquemines	C/E CHW
R2-5CWP-2000-029	Delta-Building Diversion at Benny's Bay 50000 cfs with Outfall Management	USACE	MR-13		Mississippi River Delta	Plaquemines	C/E CHW
R2-5CWP-2000-033	Small Freshwater Diversion to the Northwestern Barataria Basin	USEPA	BA-34		Barataria	St. James/Lafourche	C/E CFW
R2-5CWP-2000-034	Delta-Building Diversion at Myrtle Grove	USACE	BA-33		Barataria	Plaquemines/Jefferson/Lafourche	C/E CHW
R2-5CWP-2000-037	Delta-Building Diversion at Benny's Bay 20000 cfs with Outfall Management	USACE			Mississippi River Delta	Plaquemines	C/E CHW
R2-5CWP-2000-038	South Lake Salvador Shoreline Protection and Marsh Creation	NMFS			Barataria	Lafourche	C/E CHW; PP CHW
R2-5CWP-1999-046	Barataria Basin Landbridge Shoreline Protection Phase III	NRCS	BA-27c	XBA-63iii	Barataria	Lafourche/Jefferson	PP CHW
R2-5CWP-1999-050	LA Highway 1 Marsh Creation (S. of Leeville)	USEPA	BA-29	BA-32a	Barataria	Lafourche	C/E CHW; C/E COR
R2-5CWP-1999-054	East/West Grand Terre Restoration Project	NMFS	BA-30	XBA-1a/b	Barataria	Jefferson	C/E CHW; C/E CBSS

Table C-1: Region 2 RRP Accepted Restoration Projects (Continued)

RRP Track Code	Project Name	Sponsor Organization(*)	State Project Number	Federal Project Number	Basin	Parish	RRP Restoration Type (**)
R2-5CWP-1999-058	River Diversion (15000 cfs) Between Triumph and Venice	USACE	BA-31		Barataria	Plaquemines	C/E CHW; C/E CSAV
R2-5CWP-1999-059	Sediment Trap South of Venice	USACE	MR-12		Mississippi River Delta	Plaquemines	C/E CHW
R2-5CWP-1999-065	Amoretta (City Price) Freshwater Diversion	NRCS			Mississippi River Delta	Plaquemines	C/E CHW
R2-5CWP-1999-066	East Golden Meadow Terracing Project	USACE			Barataria	Lafourche	C/E CHW
R2-5CWP-1999-067	Grand Pierre Island Restoration	USEPA			Barataria	Plaquemines	C/E CBSS; PP CHW; PP CBSS
R2-3JEF-082301-075	Wave Absorbers/Reef Zones in Barataria Bay	JEF			Barataria	Jefferson	C/E COR; PP CHW
R2-2TNC-012402-084	Des Allemands (Portfolio Site_Nature Conservancy)	Nature Conservancy			Barataria	St. John/ St. Charles/ Lafourche	AcLp CHW; AcLp CFW; AcLp CBSS
R2-2TNC-012402-086	Fort Jackson Woods (Action Site_N.C.)	Nature Conservancy			Barataria	Plaquemines	AcLp CFW
R2-2TNC-012402-087	Lake Boeuf (Action Site_N.C.)	Nature Conservancy			Barataria	Lafourche	AcLp CHW; AcLp CFW
R2-2TNC-012402-089	Grand Isle/Barataria Bay Complex (Portfolio Site_N.C.)	Nature Conservancy			Barataria	Lafourche/ Jefferson/ Plaquemines	AcLp CHW; AcLp CFW; AcLp CBSS
R2-2TNC-012402-090	River Aux Chenes Forest (Portfolio Site_N.C.)	Nature Conservancy			Breton Sound	Plaquemines	AcLp CHW; AcLp CFW
R2-2TNC-012402-091	Abandoned Channel of Bayou Barataria (Portfolio Site_N.C.)	Nature Conservancy			Barataria	Jefferson	AcLp CHW; AcLp CFW
R2-2TNC-012402-093	Jean Lafitte NP (Portfolio Site_N.C.)	Nature Conservancy			Barataria	Jefferson	AcLp CHW; AcLp CFW
R2-2TNC-012402-094	Caernarvon Marshes (Portfolio Site_N.C.)	Nature Conservancy			Breton Sound	Plaquemines	AcLp CHW
R2-2TNC-012402-095	Des Allemands Marsh (Portfolio Site_N.C.)	Nature Conservancy			Barataria	St. John/ Lafourche/ St. Charles	AcLp CHW; AcLp CFW
R2-2TNC-012402-096	Delta Farms Marshes (Portfolio Site_N.C.)	Nature Conservancy			Barataria	Lafourche	AcLp CHW
R2-2TNC-012402-098	Lake Salvador (Portfolio Site_N.C.)	Nature Conservancy			Barataria	St. Charles/ Jefferson/Lafourche	AcLp CHW; AcLp CFW

Table C-1: Region 2 RRP Accepted Restoration Projects (Continued)

RRP Track Code	Project Name	Sponsor Organization(*)	State Project Number	Federal Project Number	Basin	Parish	RRP Restoration Type (**)
R2-5CWP-2002-102	Bayou Dupont Sediment Delivery System	USEPA			Barataria	Plaquemines/Jefferson	C/E CHW
R2-5CWP-2002-103	Shell Island Barrier Headland Restoration	NRCS			Barataria	Plaquemines	C/E CHW; C/E CBSS; PP CHW
R2-5CWP-2002-104	East Fourchon Marsh Creation and Terracing	NMFS			Barataria	Lafourche	C/E CHW
R2-2DU-082802-116	Pass A Loutre WMA Crevasse Splays	DU			Mississippi River	Plaquemines	C/E CHW
R2-3JEF-010303-125	Grand Pierre Island Restoration (BS-1)	JEF		XBA-1c	Barataria	Plaquemines	C/E CHW; C/E CBSS; PP CHW
R2-3JEF-010303-126	Elmer's Island and West Grande Terre Oak Ridge Restoration (BI-4)	JEF			Barataria	Lafourche/Jefferson	C/E CHW; C/E CFW
R2-3JEF-010303-127	Caminada Chenier Restoration (FN-1)	JEF			Barataria	Lafourche	C/E CFW
R2-3JEF-010303-128	Grand Isle Plan (BI-6)	JEF			Barataria	Jefferson	C/E CHW; PP CHW
R2-3JEF-010303-129	Naomi Siphon Sediment Enrichment (NA-1)	JEF			Barataria	Plaquemines	C/E CHW
R2-3JEF-010303-130	Hero Canal Diversion (NA-7)	JEF		BA-13	Barataria	Plaquemines	C/E CHW; C/E CFW
R2-3JEF-010303-131	Bayou Dupont Sediment Delivery Expansion (NA-9)	JEF			Barataria	Plaquemines/Jefferson	C/E CHW
R2-3JEF-010303-133	Myrtle Grove Natural Ridge Restoration (MG-1)	JEF			Barataria	Jefferson	C/E CFW
R2-3JEF-010303-134	Bayou Segnette Shoreline Restoration at Yankee Pond (CS-5)	JEF			Barataria	Jefferson	PP CHW; PP CFW
R2-3JEF-010303-135	North of Yankee Pond Restoration (CS-6)	JEF			Barataria	Jefferson	C/E CHW; PP CHW
R2-3JEF-010303-136	Southeast Lake Salvador near Bayou Villars Shoreline Protection/Stabilization (CS-9)	JEF			Barataria	Jefferson	C/E CHW; PP CHW
R2-3JEF-010303-137	Northeast Lake Salvador Chenier Restoration (CS-10)	JEF			Barataria	Jefferson	C/E CFW; PP CHW; PP CFW
R2-3JEF-010303-138	North Cuba Island Shoreline Protection	JEF			Barataria	St. Charles	PP CHW
R2-3JEF-010303-139	Tenneco Canal Restoration-National Park Service (CS-18)	JEF			Barataria	Jefferson	C/E CHW

Table C-1: Region 2 RRP Accepted Restoration Projects (Continued)

RRP Track Code	Project Name	Sponsor Organization(*)	State Project Number	Federal Project Number	Basin	Parish	RRP Restoration Type (**)
R2-3JEF-010303-140	Goose Bayou to Cypress Bayou Shoreline Protection (NA-3)	JEF			Barataria	Jefferson	C/E CFW; PP CHW; PP CFW
R2-3JEF-010303-141	South Shore of the Pen Shoreline Protection/Stabilization (MG-5)	JEF			Barataria	Jefferson	C/E CHW; PP CHW
R2-3JEF-010303-142	Land Bridge Shoreline Protection Extension and Wetland Protection (PR-7)	JEF			Barataria	Jefferson	C/E CHW; PP CHW
R2-3JEF-010303-143	Bayou Perot/Bayou Rigolettes Peninsula Restoration (PR-11)	JEF			Barataria	Jefferson	C/E CHW; PP CHW
R2-3JEF-010303-144	Bay Dos Gris Vicinity Wetlands Restoration	JEF			Barataria	Jefferson	C/E CHW
R2-3JEF-010303-145	Mud Lake Vicinity Wetland Restoration (LL-5)	JEF			Barataria	Jefferson	C/E CHW; PP CHW
R2-3JEF-010303-146	BBWW from Bayou Normand to Bayou St. Denis Shoreline Restoration (LL-6)	JEF			Barataria	Jefferson	PP CHW
R2-3JEF-010303-147	North Barataria Bay Shoreline Wave Breaks	JEF			Barataria	Jefferson	PP CHW
R2-3JEF-010303-148	Whiskey Canal Wetland Enhancement (CS-19)	JEF			Barataria	Jefferson	C/E CHW
R2-3JEF-010303-149	Dupre Cut Project 9 (BA-26) Wetlands Restoration (MG-3)	JEF			Barataria	Jefferson	C/E CHW
R2-3JEF-010303-150	Lafitte Oil and Gas Field (East) Restoration (MG-2)	JEF			Barataria	Jefferson	C/E CHW
R2-3JEF-010303-151	Manila Oil and Gas Restoration (MG-4)	JEF			Barataria	Jefferson	C/E CHW
R2-3JEF-010303-152	Little Lake Hunting Club Wetland Restoration (PR-3)	JEF			Barataria	Jefferson	C/E CHW; PP CHW
R2-3JEF-010303-153	Delta Farms Oil and Gas Field Restoration (PR-6)	JEF			Barataria	Jefferson	C/E CHW; PP CHW
R2-3JEF-010303-154	Bayou Rigolettes Bayou Perot and Harvey Cut Channel Management (PR-1)	JEF			Barataria	Jefferson	C/E CHW
R2-3JEF-010303-155	Dupre Cut/Barataria Bay Waterway Channel Management (PR-2)	JEF			Barataria	Jefferson	C/E CHW
R2-3JEF-010303-156	Bayou St. Denis Channel Management (LL-1)	JEF			Barataria	Jefferson	C/E CHW
R2-3JEF-010303-158	Wetland Harbor Activities Recreational Facility (WHARF) (CS-4)	JEF			Barataria	Jefferson	R

Table C-1: Region 2 RRP Accepted Restoration Projects (Continued)

RRP Track Code	Project Name	Sponsor Organization(*)	State Project Number	Federal Project Number	Basin	Parish	RRP Restoration Type (**)
R2-3JEF-010303-159	Elmer's Island Acquisition and Preservation (BI-3)	JEF			Barataria	Jefferson	Ac/LP CHW; Ac/LP CFW; Ac/LP CBSS; R
R2-3JEF-010303-162	North Bayou Segnette Water Quality Improvement Project (CS-1)	JEF			Barataria	Jefferson	C/E CBSS
R2-3JEF-010303-163	Bayou Segnette Wetlands Sewage Effluent Diversion (CS-3)	JEF			Barataria	Jefferson	C/E CHW; C/E CFW
R2-3JEF-010303-164	Rosethorne Wetlands Sewage Effluent Diversion (NA-6)	JEF			Barataria	Jefferson	C/E CHW C/E CFW
R2-3JEF-010303-166	Barataria Basin Barrier Levee (BW-1)	JEF			Barataria	Jefferson	C/E CHW
R2-3JEF-010303-169	Jones Point Shipyard Wetland Restoration-National Park Service (CS-17)	JEF			Barataria	Jefferson	C/E CFW
R2-3JEF-010303-171	Grand Isle Oil and Gas Pipeline Corridor Shoreline Protection (BI-5)	JEF			Barataria	Jefferson	PP CBSS
R2-3LBLD-010603-172	South of Clovelly Farms Levee Stabilization (C1)	LBLD			Barataria	Lafourche	C/E CHW
R2-3LBLD-010603-173	East of Clovelly Farms Levee Stabilization (C2)	LBLD			Barataria	Lafourche	C/E CHW
R2-3LBLD-010603-174	North of Clovelly Farms Levee Stabilization (C2)	LBLD			Barataria	Lafourche	C/E CHW
R2-3LBLD-010603-175	Delta Farms Levee Stabilization (C4)	LBLD			Barataria	Lafourche	C/E CHW; PP CHW
R2-3LBLD-010603-176	GIWW Bank Stabilization Phase 1 (C5)	LBLD			Barataria	Lafourche	C/E CHW; PP CHW
R2-3LBLD-010603-177	GIWW Bank Stabilization Phase 2 (C6)	LBLD			Barataria	Lafourche	C/E CHW; PP CHW
R2-3LBLD-010603-178	GIWW Bank Stabilization Phase 3 (C7)	LBLD			Barataria	Lafourche	C/E CHW; PP CHW
R2-3LBLD-010603-179	Bayou Perot Shoreline Protection (C8)	LBLD			Barataria	Lafourche	C/E CHW; PP CHW
R2-3LBLD-010603-180	West of Bayou Perot Marsh Creation (C9)	LBLD			Barataria	Lafourche	C/E CHW
R2-3LBLD-010603-181	North of Little Lake Phase 1 Marsh Creation (C10)	LBLD			Barataria	Lafourche	C/E CHW; PP CHW
R2-3LBLD-010603-182	North of Little Lake Phase 2 Marsh Creation (C11)	LBLD			Barataria	Lafourche	C/E CHW

Table C-1: Region 2 RRP Accepted Restoration Projects (Continued)

RRP Track Code	Project Name	Sponsor Organization(*)	State Project Number	Federal Project Number	Basin	Parish	RRP Restoration Type (**)
R2-3LBLD-010603-183	South of Yankee Canal Freshwater Diversion (LE1)	LBLD			Barataria	Lafourche	C/E CHW
R2-3LBLD-010603-184	Pointe Fourchon LA Highway 1 Ridge Protection (CB1)	LBLD			Barataria	Lafourche	C/E CHW
R2-3LBLD-010603-185	Lake Laurier LA Highway 1 Ridge Protection (CB2)	LBLD			Barataria	Lafourche	C/E CHW
R2-3LBLD-010603-186	Bay Jaque Hydrologic Restoration (CB3)	LBLD			Barataria	Lafourche	C/E CHW
R2-3LBLD-010603-187	Tidewater Canal Hydrologic Restoration (CB4)	LBLD			Barataria	Lafourche	C/E CHW
R2-3LBLD-010603-188	Golden Meadow Farms Hydrologic Restoration (CB5)	LBLD			Barataria	Lafourche	C/E CHW
R2-3LBLD-010603-189	Hydrologic Restoration South of Bayou L'ours Ridge (LL1)	LBLD			Barataria	Lafourche	C/E CHW
R2-3LBLD-010603-190	Marsh Rim Establishment on the South Shore of Little Lake (LBLD1)	LBLD			Barataria	Lafourche	C/E CHW; PP CHW
R2-3LBLD-010603-191	East Snail Bay Shoreline Protection (LBLD2)	LBLD			Barataria	Lafourche	PP CHW
R2-3LBLD-010603-192	West of Snail Bay Shoreline Protection and Marsh Creation (LBLD3)	LBLD			Barataria	Lafourche	C/E CHW; PP CHW
R2-3LBLD-010603-193	Live Oak Bay Shoreline Protection (LBLD4)	LBLD			Barataria	Lafourche	PP CHW
R2-3LBLD-010603-194	Hackberry Bay North Island Restoration (LBLD5)	LBLD			Barataria	Lafourche	C/E CHW; PP CHW
R2-3LBLD-010603-195	West Champagne Bay Marsh Creation (LBLD6)	LBLD			Barataria	Lafourche	C/E CHW; PP CHW
R2-3LBLD-010603-196	Caminada Bay Breakwaters (LBLD7)	LBLD			Barataria	Lafourche	C/E CHW; PP CHW
R2-3LBLD-010603-197	Lake Palourde Tidal Restriction (LBLD8)	LBLD			Barataria	Lafourche	C/E CHW
R2-3LBLD-010603-198	Caminada Bay Marsh Creation (LBLD9)	LBLD			Barataria	Lafourche	C/E CHW; PP CHW
R2-4LDWF-061103-204	Cultch Placement for Oyster Enhancement - Hackberry Bay	LDWF			Barataria	Jefferson/ Lafourche	C/E COR
R2-4LDWF-061103-205	Cultch Placement for Oyster Enhancement - Barataria Bay	LDWF			Barataria	Jefferson	C/E COR

Table C-1: Region 2 RRP Accepted Restoration Projects (Continued)

RRP Track Code	Project Name	Sponsor Organization(*)	State Project Number	Federal Project Number	Basin	Parish	RRP Restoration Type (**)
R2-5CWP-2003-216	Caernarvon Diversion Outfall Management (East) BS-5-2	USACE		BS-5-2	Breton Sound	St. Bernard/Plaquemines	C/E CHW
R2-5CWP-2003-218	Spanish Pass Diversion	USACE			Mississippi River	Plaquemines	C/E CHW
R2-1MPH-061903-225	Edward Wisner Marsh Creation	Edward Wisner Foundation			Barataria	Lafourche	C/E CHW
R2-3SJA-062703-226	Hydrologic Restoration / South Vacherie	Bayou Chevreuil Land Company			Barataria	St. James	C/E CHW; C/E CFW
R2-3SJA-062703-228	Levee Gapping / West Bank St. James Parish	St. James Parish CZM			Barataria	St. James	C/E CHW; C/E CFW
R2-5CWP-2003-231	Lake Lery Shoreline Protection	LDNR/Coastal Resources Division			Breton Sound	St. Bernard	PP CHW
R2-5CWP-2003-232	Shell Island Barrier Protection (2-4)	NRCS			Barataria	Plaquemines	PP CHW; PP BSS
R2-3SJA-062703-233	Wetland Creation-Parishwide / West Bank	St. James Parish CZM			Barataria	St. James	C/E CHW; C/E CFW
CW-5CWP-2000-043	Deep Hole Breakwaters	USACE			Barataria	Plaquemines	C/E CBSS
CW-5CWP-2000-044	Enhancing Salt Marsh Creation by Coupling Bay Bottom Terracing with Innovative SAV Plantings	NMFS			Coastwide	Coastwide	C/E CHW; C/E CSAV
CW-5CWP-2000-045	Fiber Mat Demo for Erosion Control and SAV and Marsh Creation	USEPA			Terrebonne	Terrebonne	C/E CHW; C/E CBSS; C/E CSAV; PP CHW; PP CBSS
CW-5CWP-1999-048	Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites	USACE	MR-11	MR-DEMO	Mississippi River Delta	No location Identified	C/E CHW

C-8

- (*)
- | | | |
|----------|--|---|
| NRCS | Natural Resource Conservation Service | C/E COR Creation/Enhancement of Coastal Oyster Reefs |
| NMFS | National Marine Fisheries Service | C/E CSAV Creation/Enhancement of Coastal Submerged Aquatic Vegetation |
| USEPA | U.S. Environmental Protection Agency | PP CHW Physical Protection of Coastal Herbaceous Wetlands |
| USACE | U.S. Army, Army Corps of Engineers | PP CFW Physical Protection of Coastal Forested Wetlands |
| USFWS | U.S. Fish and Wildlife Service | PP CBSS Physical Protection of Coastal Beaches/Shorelines/Streambeds |
| DU | Ducks Unlimited | AcLp CHW Acquisition/Legal Protection of Coastal Herbaceous Wetlands |
| JEF | Jefferson Parish | AcLp CFW Acquisition/Legal Protection of Coastal Forested Wetlands |
| LBLD | Lafourche Basin Levee District | AcLp CBSS Acquisition/Legal Protection of Coastal Beaches/Shorelines/Streambeds |
| LDNR/CRD | Louisiana Department of Natural Resources | R Recreational Resources Restoration |
| LDWF | Louisiana Department of Wildlife and Fisheries | |
- (**)
- | | |
|----------|---|
| C/E CHW | Creation/Enhancement of Coastal Herbaceous Wetlands |
| C/E CFW | Creation/Enhancement of Coastal Forested Wetlands |
| C/E CBSS | Creation/Enhancement of Coastal Beaches/Shorelines/Streambeds |

Table C- 2: Region 2 RRP Restoration Projects Not Included

RRP Track Code	Project Name	Sponsor Organization (*)	State Project Number	Federal Project Number	Basin	Parish	Reason for Exclusion
R2-3JEF-010303-132	Freshwater Introduction through Abandoned O&G Pipelines (BW-2)	JEF			Barataria	Basinwide	Not one of the Restoration types
R2-3JEF-010303-157	Grande Terre Channel Management (BI-1)	JEF			Barataria	Jefferson	Insufficient information provided
R2-3JEF-010303-165	Goose Bayou to Lafitte Levee (NA-8)	JEF			Barataria	Jefferson	No nexus to "potentially injured trust resources or services"
R2-3JEF-010303-168	Peters and Engineers Road Extension and Widening (JW-1)	JEF			Barataria	Jefferson	No nexus to "potentially injured trust resource or services"
R2-3JEF-010303-170	Shoreline Stabilization at North Bank of Bayou Rigolette near Bayou Barataria (PR-5)	JEF			Barataria	Jefferson	Insufficient information provided

C-9

- (*)
- | | | | |
|----------|--|-----------|---|
| NRCS | Natural Resource Conservation Service | C/E COR | Creation/Enhancement of Coastal Oyster Reefs |
| NMFS | National Marine Fisheries Service | C/E CSAV | Creation/Enhancement of Coastal Submerged Aquatic Vegetation |
| USEPA | U.S. Environmental Protection Agency | PP CHW | Physical Protection of Coastal Herbaceous Wetlands |
| USACE | U.S. Army, Army Corps of Engineers | PP CFW | Physical Protection of Coastal Forested Wetlands |
| USFWS | U.S. Fish and Wildlife Service | PP CBSS | Physical Protection of Coastal Beaches/Shorelines/Streambeds |
| DU | Ducks Unlimited | AcLp CHW | Acquisition/Legal Protection of Coastal Herbaceous Wetlands |
| JEF | Jefferson Parish | AcLp CFW | Acquisition/Legal Protection of Coastal Forested Wetlands |
| LBLD | Lafourche Basin Levee District | AcLp CBSS | Acquisition/Legal Protection of Coastal Beaches/Shorelines/Streambeds |
| LDNR/CRD | Louisiana Department of Natural Resources | R | Recreational Resources Restoration |
| LDWF | Louisiana Department of Wildlife and Fisheries | | |
- (**)
- | | |
|----------|---|
| C/E CHW | Creation/Enhancement of Coastal Herbaceous Wetlands |
| C/E CFW | Creation/Enhancement of Coastal Forested Wetlands |
| C/E CBSS | Creation/Enhancement of Coastal Beaches/Shorelines/Streambeds |

APPENDIX D - NON-PROJECT-SPECIFIC CASH SETTLEMENT COST ANALYSES FOR COASTAL HERBACEOUS WETLANDS IN REGION 2 [RESERVED]

This section is reserved pending determination of feasibility of the development of unit costs for all regions. Therefore, references to the settlement alternative of “Non-Project-Specific Cash Settlement” in the September 2003 Draft RRP for Region 2 have been removed from this Final RRP document. If feasibility of the unit costs across all regions is determined at a later date, this Final RRP may be amended to include this settlement alternative.

APPENDIX E - NON-PROJECT-SPECIFIC CASH SETTLEMENT COST ANALYSES FOR FORESTED WETLANDS IN REGION 2 [RESERVED]

This section is reserved pending determination of feasibility of the development of unit costs for all regions. Therefore, references to the settlement alternative of “Non-Project-Specific Cash Settlement” in the September 2003 Draft RRP for Region 2 have been removed from this Final RRP document. If feasibility of the unit costs across all regions is determined at a later date, this Final RRP may be amended to include this settlement alternative.

APPENDIX F - NON-PROJECT-SPECIFIC CASH SETTLEMENT COST ANALYSES FOR OYSTER REEFS IN REGION 2 [RESERVED]

This section is reserved pending determination of feasibility of the development of unit costs for all regions. Therefore, references to the settlement alternative of “Non-Project-Specific Cash Settlement” in the September 2003 Draft RRP for Region 2 have been removed from this Final RRP document. If feasibility of the unit costs across all regions is determined at a later date, this Final RRP may be amended to include this settlement alternative.

APPENDIX G - PUBLIC COMMENTS AND RESPONSES

Comments received from LDWF on the Draft RRP for Region 2 during the public review period

State of Louisiana



James H. Jenkins, Jr.
Secretary

Department of Wildlife & Fisheries
Post Office Box 98000
Baton Rouge, LA 70898-9000
(225) 765-2800

M.J. "Mike" Foster, Jr.
Governor

10/22/03

William Conner, Chief
Damage Assessment Center
Office of Response and Restoration / NOS
National Oceanic and Atmospheric Administration
1305 East-West Highway, SSMC#4, 10th floor
Silver Spring, MD 20910

Dear Mr. Conner:

The Department of Wildlife and Fisheries offers the following comments on the Draft Regional Restoration Plan for Region 2 (Region 2 RRP).

The list of biological resources and habitat types, associated with Region 2, was described. This list should remain open to additions or refinement of description to account for natural or man-made changes in the region, or improvements in our understandings of the system.

The determination of the unit costs of restoration types may be based on too broad a time scale to prove accurate. These should be continually re-evaluated to reflect the costs associated with the first real projects implemented.

A list of additional specific comments is attached to this letter. Thank you for the opportunity to provide comments on the program.

Sincerely,

A handwritten signature in black ink, appearing to read "James H. Jenkins, Jr.", written over a faint circular stamp.

James H. Jenkins, Jr.
Secretary

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Region 2 RRP
Comments on Draft
Page 2

Region 2 RRP
Additional Specific Comments from LDWF

In Appendix A, Table A-10, please change the common name of *Callinectes sapidus* to "greater" blue crab. Also, add to the list: *Callinectes similus* = lesser blue crab, *Menippe adina* = stone crab, and *Panopeus spp.* = mud crab. Also, please change *Mercenaria spp.* = clam to *Mercenaria campechiensis* = southern quahog clam.

In Appendix C, Table C-9, please add to list for Sponsor Organizations (*), LDWF = Louisiana Department of Wildlife and Fisheries.

In Appendix E, Figure E-8, can you change the lines (trees per acre and productivity) to be distinguishable in the black and white copy?

In Appendix F, second paragraph on page F-1, third line in paragraph, please delete "a" before "healthy". On page F-2, in the first paragraph under **Created Reefs in Louisiana: two-versus three-dimensional**, please change "more than" to "approximately" before "two million acres". And in the same paragraph, please add "or oyster shell" between "limestone" and "suitable". On the next line, please replace "growing and retrieving" with "recruiting and retaining". In the same sentence, please replace "'seed'" with "spat". Also in the same sentence, please replace "a" before "source" with "an eventual", and "spat" with "seed".

Also in Appendix F, References, on page F-9, please add "Banks, P, 2003. LDWF. Personnel communication. April, 2003."

Comments received from LDEQ on the Draft RRP for Region 2 during the public review period



State of Louisiana
Department of Environmental Quality



M. J. "MIKE" FOSTER, JR.
GOVERNOR

L. HALL BOHLINGER
SECRETARY

October 8, 2003

Mr. William Conner
Chief, NOAA/Damage Assessment Center
1305 East-West Highway, SSMC #4, 10th Floor
Silver Spring, MD 20910

RE: Draft Regional Restoration Plan, Region 2.

Dear Mr. Conner:

I have reviewed the above referenced document for the Water Quality Certifications Unit of the Department of Environmental Quality. The draft adequately presents and documents the proposed plan. If implementation of work under the plan requires a permit from the U. S. Army Corps of Engineers under Section 404 of the Clean Water Act, you should contact this office to determine if a Section 401 Water Quality Certification is also necessary.

Thank you for the opportunity to review the draft plan.

Sincerely,

A handwritten signature in black ink, appearing to read "Larry Wiesepape".

Larry Wiesepape, Ph. D.
Environmental Scientist Supervisor

C: Dr. Charles Killebrew



OFFICE OF ENVIRONMENTAL SERVICES • P.O. BOX 4313 • BATON ROUGE, LOUISIANA 70821-4313

AN EQUAL OPPORTUNITY EMPLOYER



Comments received from LDNR on the Draft RRP for Region 2 during the public review period

State of Louisiana



M.J. "MIKE" FOSTER, JR.
GOVERNOR

JACK C. CALDWELL
SECRETARY

DEPARTMENT OF NATURAL RESOURCES

October 22, 2003

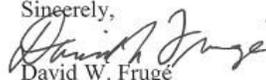
Dr. William Conner
Chief, NOAA/Damage Assessment Center
1305 East-West Highway, SSMC #4, 10th floor
Silver Springs, MD, 20910

Dear Dr. Conner:

The Louisiana Department of Natural Resources/Coastal Management Division (LDNR/CMD) appreciates the opportunity to review the Draft Regional Restoration Plan for Region 2 (Region 2 RRP). The Region 2 RRP is a component of the Louisiana Regional Restoration Planning Program. That program will be used by Federal and State natural resource trustees to expedite and reduce the cost of the natural resource damage assessment (NRDA) process, provide for consistency and predictability in the NRDA process, and increase restoration of lost natural resources and services affected by oil spills in Louisiana.

The Oil Spill Liaison staff within LDNR/CMD has worked closely with other State and Federal natural resource trustees in the development of the Louisiana Regional Restoration Planning Program and the Region 2 RRP. As a State natural resource trustee, LDNR is committed to the effective implementation of that program and the fulfillment of its objectives. Our staff is proud of the excellent collaboration among State and Federal natural resource trustees in this worthwhile effort. We look forward to continuing this collaborative process in the future.

Sincerely,


David W. Frugé
Administrator

CC: Roland Guidry (LOSCO/Office of the Governor)

COASTAL MANAGEMENT DIVISION P.O. BOX 44487 BATON ROUGE, LOUISIANA 70804-4487
TELEPHONE (225) 342-7591 FAX (225) 342-9439
AN EQUAL OPPORTUNITY EMPLOYER

Comments received from USDOl on the Draft RRP for Region 2 during the public review period



IN REPLY REFER TO:

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Post Office Box 649
Albuquerque, New Mexico 87103

October 23, 2003

William Connor, Ph.D.
Chief, Damage Assessment Center
U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
1305 East-West Highway
N/ORCA x1 SSMC4
Silver Spring, MD 20910

Dear Dr. Connor:

In response to the notice dated September 17, 2003, soliciting comments on the Louisiana Regional Restoration Planning Program (LRRPP) Draft Region 2 Restoration Plan, the following are comments provided by the U.S. Department of the Interior. It is my understanding that the U.S. Fish and Wildlife Service has also provided comments.

SPECIFIC COMMENTS

Page 22, first full paragraph under "Cash Settlement." This information on Discounted Service Acre Years (DSAYs) has no context. Why is \$28,464 correct? Does the revised Programmatic Environmental Impact Statement (PEIS) have a full reference for this cost and the Habitat Equivalency Analysis in Appendix D? If not, it needs a reference for a defensible settlement.

Appendix A. Does the revised PEIS provide life history data (e.g., longevity, birth rate, years of breeding, start year of breeding, amount of habitat necessary for breeding) for these species? If not, development of inputs for Resource Equivalency Analyses would aid in facilitating quicker settlements.

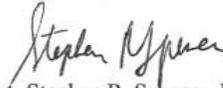
Page D-11, Appendix D-1. Does the revised PEIS provide more information on implementation? Staff implementing the LRRPP may start inappropriately averaging and dividing costs by acres for other projects. It may be useful to have more details on some of the limitations and special circumstances that make some projects more expensive than others. We recommend additional interpretation to make this information more useful.

Page D-19, Appendix D-4. A discount factor should be shown. Does the revised PEIS have full instruction on how to do Habitat Equivalency Analysis? If not, some may need to be added.

Page D-20, Appendix D-20. Why is this relative productivity true? Are there any references related to this in the PEIS?

Thank you for the opportunity to provide comments on the Draft Region 2 Restoration Plan. If you have questions or need additional information, feel free to contact me at (505) 766-3565.

Sincerely,



Stephen R. Spencer, Ph.D.
Acting Regional Environmental Officer

cc: Director/Deputy Director, DOI/OEPC, Washington, DC
Manager, Natural Resource Damage Assessment and Restoration Program, DOI,
Washington, DC
Director, Office of Policy Analysis, DOI, Washington, DC
ATTN: Kristin Skrabis
Regional Director, FWS, Atlanta, GA
ATTN: Diane Beeman
Field Supervisor, FWS, Lafayette, LA
ATTN: Warren Lorentz

Comments received from USFWS on the Draft RRP for Region 2 during the public review period



United States Department of the Interior

FISH AND WILDLIFE SERVICE

646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506

October 21, 2003

Mr. William Conner
Chief, NOAA/Damage Assessment Center
1305 East-West Highway, SSMC#4, 10th Floor
Silver Spring, MD, 20910

Dear Mr. Conner,

The FWS Lafayette Field Office has reviewed the Louisiana Regional Restoration Planning Program, Draft Regional Restoration Plan - Region 2, September 2003 (Region 2 RRP). Overall, the Region 2 RRP document is well-written, however, we offer the following specific comments.

Page iii, Table of Contents - The Table of Contents is incomplete.

Page 21, Settlement Calculation, RP Implemented Restoration Project, last sentence - The last sentence is unclear and it appears to be contradictory regarding the issue of liability.

Page 24, Cash Settlement -Non-Project-Specific Cash Out, Oyster Reefs, last paragraph - The average cost/DKBY is not consistent with the cost/DKBY in Appendix F.

Pages A-2 through A-10, Tables A-1 through A-12 - These tables should be revised for spelling, scientific accuracy, and overall applicability in accordance with the May 30, 2003 and July 7, 2003, comments provided to NOAA by this Field Office.

Pages B-1 through B-3, Appendix B – Project Solicitation Form - This section states that the Project Solicitation Form is pending OMB approval. We strongly recommend that the draft form be circulated among the participating agencies for approval prior to being finalized by OMB. As stated in our July 7, 2003 comments to NOAA, we recommended that a “Conservation Servitude Agreement” check box be added within the Project Status block of this form in order to ensure that the landowners are aware that the Trustees require a conservation servitude agreement. We also recommended adding language in the Project Status instruction section to briefly describe conservation servitude agreements, their length of term (25 years, 30 years, perpetuity, etc.), etc.

If you have any questions regarding our comments, please call Warren Lorentz,
Contaminant Specialist of this office at 337-291-3126.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell C. Watson". The signature is written in a cursive style with a large initial "R".

Russell C. Watson
Acting Field Supervisor

Comments received from the Natural Resource Conservation Service on the Draft RRP for Region 2 during the public review period

United States Department of Agriculture



Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

November 24, 2003

Mr. William Conner
Chief, NOAA/Damage Assessment Center
1305 East-West Highway, SSMC #4, 10th Floor
Silver Spring, MD 20910

Dear Mr. Conner:

RE: **THE LA REGIONAL RESTORATION PLANNING PROGRAM
DRAFT
REGION 2**

Thank you for providing our agency with the opportunity to respond to your letter wherein you requested views and comments on the above draft.

At this time, NRCS has no comment on this draft.

Should you have questions regarding the above comments, please feel free to contact Steve Carmichael, ASTC/State Resource Conservationist, at (318) 473-7774 or Britt Paul, ASTC/WR/RD, at (318) 473-7756.

Sincerely,

Acting For

A handwritten signature in cursive script, appearing to read "E. J. Giering III".

E. J. Giering III, P.E.
State Conservation Engineer

cc: Steve Carmichael, ASTC/Resource Conservationist, Alexandria State Office
Britt Paul, ASTC/WR/RD, Alexandria State Office

The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment.

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Comments received from the Louisiana Mid-Continent Oil and Gas Association on the Draft RRP for Region 2 during the public review period



**LOUISIANA MID-CONTINENT
OIL AND GAS ASSOCIATION**

801 NORTH BOULEVARD, SUITE 201, BATON ROUGE, LA 70802-5727
TELEPHONE (225) 387-3205 FAX (225) 344-5502
E-MAIL info@lmoga.com

November 13, 2003

Mr. William Conner
Chief, NOAA/Damage Assessment Center
1305 East-West Highway, SSMC #4, 10th Floor
Silver Spring, MD 20910

Dear Mr. Conner:

SUBJECT: LOUISIANA REGIONAL RESTORATION PLANNING PROGRAM
DRAFT REGIONAL RESTORATION PLAN – REGION 2

Louisiana Mid-Continent Oil and Gas Association (LMOGA) is a trade association representing individuals and companies who produce, transport, refine and market approximately 90% of the oil and gas which transported in and through the State of Louisiana. We have participated in the Regional Restoration Plan development, are supportive of the concepts and goals set forth in the RRP documentation, and are keenly interested in the outcome of the planning process.

As we have stated in previous comments, LMOGA is generally supportive of the Louisiana Regional Restoration Planning Program. We see benefits accrued to the environment, the trustees, and the responsible party (RP) in potentially restoring services to injured resources faster and more efficiently. We fully support the process of pre-identified and pre-screened restoration projects that an RP and the trustees can select. This option becomes even more attractive when the upfront engineering and permitting has been completed. We also support the cash settlement option, particularly for smaller restoration requirements. However, it appears that this option will essentially be unusable because of its high cost per unit of services provided. This is more fully explained below.

1. Calculation of projected cost of restoration.

LMOGA encourages NOAA to make every effort to make the funding of regional restoration an attractive option by bringing the per acre cost of funding more in line with per acre costs of RP implemented projects. It is only through such realignment that it will become likely that RPs will select this option.

By regulation, selected restoration options are to be the lowest cost option that will provide lost resources and resource services. As such, in cases where the trustees and RP carry out a full damage assessment / restoration planning process, the RP pays the cost of the lowest suitable alternative, rather than an artificially inflated average cost of regional restoration.

November 13, 2003
Page Two

Using such data sources as mean costs of planned and implemented CWPPRA projects is likely to yield unrealistically high estimates of restoration costs, as these data sets tend not to be normally distributed. The population of projects included in the analysis is unduly influenced by high cost to benefit projects, such as CS-18, which is projected as costing more than \$400,000 per acre protected. In fact, analysis of this data set indicates that the standard deviation of project cost/benefit exceeds the mean, an indication of a significantly skewed data set. As such, basing regional restoration costs upon the mean from a skewed data set violates one of the central provisions of both the OPA rule and the Louisiana rule.

Regarding marsh creation, the estimated brown marsh costs were calculated using the average bid price from seven contractors. Whenever a restoration project is bid, the lowest qualified bidder will be chosen; therefore, it would be inappropriate to use an average bid price for this estimate. Rather, NOAA should consider taking the lowest bid price of the qualified bidders.

A recommended alternative that would produce more reasonable estimated restoration costs might be to normalize the data set or to establish a minimum requirement for cost/benefits prior to including a project in the data set. It should be recognized that many of these projects are proposed for federal funding since they have not been funded by private or local entities. While it is desirable to accumulate the funding necessary to implement such projects, RPs would simply not choose this higher cost option.

2. Potential double counting

It seems that there is a potential for double counting inherent in the calculation of projected costs or regional restoration. The proposed estimation methodology inflates the total cost by adding estimated pre-construction costs, monitoring costs, and oversight costs to the implementation cost. It is not clear whether the implementation costs from such data sets as CWPPRA projects do, or do not, include many of these costs in the implementation costs already. At a minimum, some of the pre-construction costs are represented in the costs of these projects. It is likely that monitoring and project oversight costs are also included. If this is indeed the case, the projected regional restoration costs are artificially high.

3. High incremental cost of monitoring and oversight.

Projected monitoring costs are very high, especially for forested wetlands. Along with problems with selection of comparison data (i.e., use of large releases with extensive and multi-faceted restoration programs), there seems to be an inherent problem in the estimation of incremental costs. As the data indicate, there tends to be a benefit of scale that accrues from relatively larger projects. Simply, larger projects are more cost effective, from a monitoring and oversight perspective, than are smaller projects. For example, monitoring on a four acre marsh restoration project is more than 40 % more expensive than on a 10 acre project and nearly four times as expensive as a 40 acre project. Since of the goals of the regional restoration program is to accrue funding for the implementation of larger projects, monitoring and oversight costs should reflect the benefits of scale inherent in such projects and should not be based upon an average that inflates costs.

4. Need to use other data sources.

LMOGA believes that other data sources, such as private mitigation banks, privately implemented restoration projects, and local government restoration projects should be included in the data set to be analyzed to produce restoration cost estimates. While these data may be more difficult to collect, their inclusion is critical to the accurate estimation of regional restoration costs. Private restoration projects and those implemented by Ducks Unlimited and The Nature Conservancy were not taken into account. We have requested cost data for crevasse-splay restoration approaches from the Southeast Louisiana Refuge and will forward this data and other data for your consideration.

5. Assumptions in DSAY calculations.

The discussion of the assumptions made for the calculation of DSAYs for each of the restoration alternatives is difficult to decipher, several of the assumptions made may create artificially inflated costs for some of these options. For example the assumption that marsh restoration only produces a 50% value of restored services relative to injury but a shoreline protection project produces 100 % value ignores a very basic assessment of the quality of the habitat being protected or created, as well as the quality of the habitat that was lost. It is entirely possible that marsh acreage lost is functioning below optimal levels and that marsh restoration projects may exceed service flows from pre-existing marshes. More should be done to evaluate these assumptions and to make their impact on the calculations of DSAYs clear.

6. Other comments.

- The draft plan does not describe the overall NRDA process from pre-assessment through injury assessment and restoration plan development. Neither does the draft plan describe the role of the RP in the process. While the Louisiana NRDA regulations place a big emphasis on a cooperative approach, the draft plan focuses primarily on the trustees' role.
- It is not clear how closure is reached for the different options, particularly for the cash-out option. Please specify.
- Table C-1 should be revised to provide priority order and include all potential restoration projects with estimated costs, acreage, habitat value, and public vs. private, if available.
- On page 1, the document states that the goals of the statewide program are to "reduce the cost of the NRDA process." This theme is repeated elsewhere (for example, page 5). While the program as described in this document may reduce administrative costs for the government, there is nothing that shows how this will reduce total costs (i.e., costs to the RP and government combined).
- On page 5, the document states that it relies on the boundaries for the four coastal regions described in the Coast 2050 Plan. The meaningfulness of these boundaries has been questioned by the National Technical Review Committee (and probably others) that is reviewing Coast 2050 and the Louisiana Coastal Area (LCA) Plan. Developing a separate RRP for each of the regions that are in

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part defined by these boundaries does not make sense and should probably not be pursued. If the boundaries are not abandoned, their use should be clearly justified. Also, if the boundaries remain intact, the footnote on page 18 (in which it is noted that these boundaries may be ignored by the Trustees) should be spelled out more clearly on first mention of the boundaries and emphasized elsewhere.

- On page 5, the document claims to improve coordination between NRDA and other mandates. Were the contents of this document considered in a consistency assessment that incorporated regulations such as Section 404 of the Clean Water Act and the proposed Louisiana Coastal Area (LCA) Plan that is being drafted by an interagency group? (Note the project list provided in this document does not match the preferred alternatives project lists provided in the LCA Plan.)
- On page 6, the document claims that 25-30 square miles of land is lost every year in coastal Louisiana. This is no longer an accurate number—recent data show that land loss rates are slowing down. The most recent estimates from USGS suggest loss rates of about 14 square miles per year over the next 50 years (on average, assuming that the Louisiana Coastal Area Plan is not implemented).
- The rationale behind the various decisions made to develop Figures 3 and 4 are not clear. Please provide the rationale.
- On page 18 and perhaps elsewhere, the document refers to project “success.” Success in this context requires a clear definition. In general, restoration projects are considered successful if they have met their stated performance standards, but the document does not discuss proposed performance standards for the projects that it promotes.
- In responsibly run restoration projects, clear objectives and performance standards are designed at the outset of the project, and success is defined in relation to performance standards. Recently, the EPA’s Mitigation Action Plan recognized the importance of performance standards. This document does not consider this aspect of restoration planning and monitoring, and instead appears to focus on ongoing and open-ended monitoring requirements without clearly spelling out that projects should have a pre-defined performance standards that establish an end point.

We appreciate your consideration of our comments and make ourselves available to discuss this further. Please call me at (225)387-3205 if you have any questions.

Sincerely,



R. Michael Lyons

**Summary of Written Comments Received on the Draft Louisiana Regional Restoration
Planning Program Regional Restoration Plan - Region 2 and Trustee Responses
Public Comment Period: September 23 to October 23, 2003**

General Comments and Responses

1. **Several commenters expressed support for the Draft Regional Restoration Plan (RRP) for Region 2, generally indicating that there would be benefits accrued to the environment, the trustees, and the Responsible Parties in potentially restoring services to injured resources faster and more efficiently. The Louisiana Department of Natural Resources cited excellent collaboration between the state and federal natural resource trustees during development of the Draft Region 2 Plan.**

Response: The trustees agree with these comments. No further response necessary.

2. **Several commenters provided editorial and minor technical comments. These include adding a reference to “Banks 2003” in Appendix F, *Non-Project-Specific Cash Settlement Cost Analyses for Oyster Reefs in Region 2 (Now Reserved)*, correcting an inconsistency in the reporting of cost/Discounted Service Acre Years (DSAY) estimates in Chapter 3, *Regional Restoration Plan*, and Appendix F, *Non-Project-Specific Cash Settlement Cost Analyses for Oyster Reefs in Region 2 (Now Reserved)*, making the lines in the Figure E-1, *Typical mortality curve due to naturally induced thinning following canopy closure of an even-aged forest. Hypothetical productivity of the same even-aged forest is displayed, but no units are applied (Now Reserved)* graph distinguishable, adding the Louisiana Department of Wildlife and Fisheries to the list of Sponsor Organizations in Table C-2, *Region 2 RRP Restoration Projects Not Included*, and presenting a complete “Table of Contents” Section.**

Response: For those comments that were unrelated to the “Non-Project-Specific Cash Settlement” alternative, the text was revised accordingly.

Note: For those comments that were related to the reserved “Non-Project-Specific Cash Settlement” alternative, the trustees have taken note of the comments on the concept of the “Non-Project-Specific Cash Settlement” alternative and the underlying unit costs. These reserved sections are pending determination of feasibility of the development of unit costs for all regions. Therefore, references to the settlement alternative of “Non-Project-Specific Cash Settlement” in the September 2003 Draft RRP for Region 2 have been removed from this Final RRP document. If feasibility of the unit costs across all regions is determined at a later date, this Final RRP may be amended to include this settlement alternative.

3. **Several commenters asked that species be added and/or removed from the tables in Appendix A to more accurately reflect the species present in Region 2.**

Response: The tables were revised accordingly.

Specific Comments and Responses

- 4. If implementation of work under the Draft RRP for Region 2 requires a permit from the U.S. Army Corp of Engineers (USACE) under Section 404 of the Clean Water Act, the trustees should contact the Water Quality Certifications Unit of the Louisiana Department of Environmental Quality to determine if a Section 401 Clean Water Certification is also necessary.**

Response: The trustees agree with this comment. No further response necessary.

- 5. The biological resources and subsequent habitat types listed in Chapter 2, *Region 2 – Description*, should remain open to additions and/or refinements.**

Response: The trustees agree with this comment. No further response necessary.

- 6. The last sentence of the “RP Implemented Restoration Project” Section of Chapter 3, *Regional Restoration Plan*, may be unclear with regards to the Responsible Party’s liability.**

Response: In response to this comment, the sentence was revised. Specifically, the phrase “. . . thereby lowering the cost of their specific liabilities” was changed to “. . . thereby lowering the cost of resolving their specific liabilities”.

- 7. Does the Final Programmatic Environmental Impact Statement (FPEIS) provide life history data for the species listed in Appendix A, *Common Biota and Associated Habitats*? If not, development of inputs for Resource Equivalency Analysis (REA) would aid in facilitating quicker settlements.**

Response: The trustees agree that development of REA inputs (e.g., species-specific life history parameters) prior to a spill could facilitate and expedite injury assessments. However, compiling this information for all of the species in Region 2 would be very time-consuming. Given the limited use of REA in past damage assessments in the state of Louisiana, the trustees believe that it would be more efficient and cost-effective to develop REA inputs as needed on a case-by-case basis.

- 8. The “*Project Solicitation Form*” [now titled “*NRDA Restoration Project Information Sheet*”] should be circulated among the participating agencies for review prior to Office of Management and Budget (OMB) approval. In addition, the form should contain a Conservation Servitude Agreement checkbox and a brief description of what a conservation servitude entails.**

Response: Each of the trustee agencies participating in development of the Louisiana Regional Restoration Planning Program will have an opportunity to review the “*NRDA Restoration Project Information Sheet*” before it is finalized for use in the Louisiana Regional Restoration Planning Program. The final form will include a Conservation Servitude Agreement’ checkbox.

- 9. Does the FPEIS have full instruction on how to do a Habitat Equivalency Analysis (HEA)? If not, some may need to be added.**

Response: The FPEIS provides a general description of HEA, as well as a specific reference to a more detailed discussion of the modeling approach.

- 10. The Draft RRP for Region 2 does not describe the overall Natural Resource Damage Assessment (NRDA) process from pre-assessment through injury assessment and restoration plan development. Neither does the Draft Plan describe the role of the Responsible Party in the process. While the Louisiana NRDA regulations place a big emphasis on a cooperative approach, the Draft Plan focuses primarily on the trustees' role.**

Response: Discussions of the NRDA process, role of the Responsible Party in the NRDA process, and cooperative assessments are provided in the Louisiana Regional Restoration Planning Program FPEIS (NOAA et al. 2007). While the trustees do not intend to repeat these discussions in the RRP (RRPs), the trustees have revised the Final RRP for Region 2 to include additional references to the appropriate sections of the Louisiana Regional Restoration Planning Program FPEIS.

- 11. It is not clear how closure is reached for the different settlement options, particularly for the cash-out option.**

Response: The trustees have revised the text to clarify that a consent decree or other binding settlement document will be required to close cases.

- 12. The process of pre-identified and pre-screened restoration projects will promote faster and more efficient restoration. This option becomes even more attractive when the upfront engineering and permitting has been completed. Table C-1, *Region 2 RRP Accepted Restoration Projects*, should be revised to provide priority order and include all potential restoration projects with estimated costs, acreage, habitat value, and public vs. private, if available.**

Response: The trustees have identified and pre-screened potential restoration projects to facilitate incident-specific restoration planning efforts. Approximately 124 potential restoration projects were identified in Region 2 prior to release of the Draft –RRP for Region 2. A similar list of potential restoration projects will be developed for each of the other eight regions established under the Louisiana Regional Restoration Planning Program (NOAA et al. 2007). Because many of these potential projects could be implemented with other sources of funds (e.g., Coastal Wetlands Planning, Protection, and Restoration Act [CWPPRA]), the trustees decided not to invest further resources towards engineering and permitting each of these potential projects prior to incident-specific restoration planning efforts.

- 13. The Draft RRP for Region 2 states that the goals of the statewide program are to “reduce the cost of the NRDA process.” While the program as described in this document may reduce administrative costs for the government, there is nothing that shows how this will reduce total costs (i.e., costs to the Responsible Party and government combined).**

Response: Under the Oil Pollution Act of 1990 (OPA) (33 USC 2701 *et seq*), Responsible Parties are responsible for costs incurred by the natural resource trustees to assess natural resources injuries and plan appropriate restoration actions. The trustees believe that by streamlining the NRDA process and making it more efficient

(e.g., pre-identification of restoration projects), costs to both the trustees and Responsible Parties will be lower.

14. **The Draft RRP for Region 2 relies on the boundaries for the four coastal regions described in the Coast 2050 Plan. The meaningfulness of these boundaries has been questioned by the National Technical Review Committee (and probably others) that is reviewing Coast 2050 and the LCA Plan. Developing a separate RRP for each of the regions that are in part defined by these boundaries does not make sense and should probably not be pursued. If the boundaries are not abandoned, their use should be clearly justified. Also, if the boundaries remain intact, the footnote on page 18 of the Draft RRP for Region 2 (in which it is noted that these boundaries may be ignored by the trustees) should be spelled out more clearly on first mention of the boundaries and emphasized elsewhere.**

Response: Coast 2050 is a joint planning initiative of state and federal agencies working to develop a strategic plan to enhance protection of the State's coastal resources. In an effort to be consistent with this effort, the boundaries of the four coastal regions in the Louisiana Regional Restoration Planning Program are the same as the four regions delineated in the Coast 2050 plan. The trustees will review any alternative boundaries identified in the final LCA Plan, and consider revising the coastal boundaries for the Regional Restoration Planning Program, as appropriate.

15. **On page 5 of the Draft RRP for Region 2, the document claims to improve coordination between NRDA and other mandates. Were the contents of this document considered in a consistency assessment that incorporated regulations such as Section 404 of the Clean Water Act and the proposed LCA Plan that is being drafted by an interagency group? (Note the project list provided in this document does not match the preferred alternatives project lists provided in the LCA Plan.)**

Response: Section 8.2, *Program Compliance with Environmental Laws and Regulations*, and Appendix E, *Compliance Status of Louisiana Regional Restoration Program with Relevant Federal and State Laws, Regulations and Programs* of the Louisiana Regional Restoration Planning Program FPEIS (NOAA et al. 2007) provide detailed information about the Louisiana Regional Restoration Planning Program compliance with environmental laws and regulations. As discussed in these sections, the program is in compliance with the Clean Water Act. The trustees believe it is probable that some of the Louisiana Regional Restoration Planning Program's restoration projects will require permits. Through coordination with the USACE, the trustees will ensure that any site-specific restoration project is properly permitted under both Sections 401 and 404 of the Clean Water Act.

The projects listed in Table C-1, *Region 2 RRP Accepted Restoration Projects*, of the Draft and this Final Region 2 Plan represents an initial list of potential restoration projects identified by the trustees. This project list is not intended to be comprehensive or final, and will be periodically updated as appropriate projects are identified for inclusion. Further, trustees are not limited to selecting projects contained in the lists, but rather can refer to the project lists as tools for expediting settlements. The trustees will, therefore, consider projects identified through the LCA planning process.

16. **On page 6 of the Draft RRP for Region 2, the document claims that 25-30 square miles of land is lost every year in coastal Louisiana. This is no longer an accurate number -- recent data show that land loss rates are slowing down. The most recent estimates from the United States Geological Survey (USGS) suggest loss rates of about 14 square miles per year over the next 50 years (on average, assuming that the LCA Plan is not implemented).**

Response: The estimate of 25-30 square miles of land lost each year is an historical average rate of loss for the combined periods of 1978-1990 and 1990 to 2000 period (Barras *et al.* 2003). The text has been revised to clarify and provide a reference for this estimate.

17. **The rationale behind the various decisions made to develop Figures 3, *Coastal Restoration Types by Trust Resources and Services*, and 4, *Inland Restoration Types by Trust Resources and Services*, are not clear. Please provide the rationale.**

Response: As described in the “Restoration Type” Section of the Draft and this Final RRP for Region 2, the trustees conducted a nexus analysis to identify one or more appropriate restoration types for each of the potentially injured resources and services. Figures 3, *Coastal Restoration Types by Trust Resources and Services*, and 4, *Inland Restoration Types by Trust Resources and Services*, conceptually demonstrate the results of this analysis for Region 2. The Region 2 Plan refers the reader to Section 4.2.4, *Relationship of Trust Resources and Services to Restoration Types/Projects*, of the Louisiana Regional Restoration Planning Program FPEIS for more detailed results and descriptions of the nexus analysis.

18. **On page 18, the Draft RRP for Region 2 refers to project “success.” Success in this context requires a clear definition. In general, restoration projects are considered successful if they have met their stated performance standards, but the document does not discuss proposed performance standards for the projects that it promotes.**

Response: Page 18 of the Draft RRP for Region 2 lists project screening criteria that will be used to select the preferred restoration project(s). These project selection screening criteria are based in part on the OPA regulations (Section 990.54(a)(1-6)). One of the criteria for selecting restoration provided by OPA, and listed on page 8 of the Draft –RRP for Region 2, is the “likelihood of success”. An explanation of the criteria is provided in Section 4.2.4.2, *Project Selection Screening Criteria*, of the Louisiana Regional Restoration Planning Program FPEIS (NOAA *et al.* 2007)

The trustees agree that determining success requires a clearly defined performance standards or criteria that can be used to determine when the desired restoration outcome has been achieved. Section 4.2.7, *Restoration Project Performance Criteria*, of the Louisiana Regional Restoration Planning Program FPEIS (NOAA *et al.* 2007) provides more information on how project performance criteria will be used to evaluate the success of restoration projects and includes guidelines that will be considered fundamental to the development off project-specific performance criteria.

19. **Clear objectives and performance standards should be designed at the outset of the project, with success defined in relation to performance standards. Recently, the Environmental protection Agency’s Mitigation Action Plan recognized the**

importance of performance standards. This document does not consider this aspect of restoration planning and monitoring, and instead appears to focus on ongoing and open-ended monitoring requirements without clearly spelling out that projects should have a pre-defined performance standards that establish an end point.

Response: The trustees agree that all restoration projects should have clear goals, objectives, and performance standards/criteria to determine project success. As stated above, Section 4.2.7, *Restoration Project Performance Criteria*, of the Louisiana Regional Restoration Planning Program FPEIS (NOAA et al. 2007) provides more information on how project performance criteria will be used to evaluate the success of restoration projects and includes guidelines that will be considered fundamental to the development off project-specific performance criteria.

The trustees also agree that monitoring of restoration projects needs to be an essential component of the Louisiana Regional Restoration Planning Program. As described in Section 4.2.8, *Restoration Project Monitoring Requirements*, of the Louisiana Regional Restoration Planning Program FPEIS (NOAA et al. 2007), monitoring will provide the trustees with quantitative information that will be used to determine when a Responsible Party has satisfied its liability for natural resource injuries or if interim corrective action is necessary. Prescribed monitoring protocols will be project-specific and vary by restoration type, habitat type, project features, and the availability of cost-effective sampling techniques. Specific monitoring requirements for restoration projects will be specified in a monitoring plan that will be drafted prior to implementation of the project. The monitoring plan will: 1) define the project objectives that must be attained to achieve the desired outcome of the restoration project; 2) identify the performance criteria that will measure the attainment of each objective; and 3) specify monitoring protocols pertaining to sampling design, sampling frequency, sampling techniques, data procurement and analysis, quality assurance and quality control of data, the schedule of site visits, report deadlines, and corrective action plans.

20. Several comments, some of which were specifically technical in nature, were received on the concept of the “Non-Project-Specific Cast Settlement” alternative and the underlying unit costs. These comments are:

- ♦ **The information in the “Cash Settlement – Non-Project-Specific Cash Settlement” Section of Chapter 3, *Regional Restoration Plan*, about the costs/DSAYs has no context. Why is \$28,464 correct? Does the FPEIS have a full reference for this cost and the HEA in Appendix D, *Non-Project-Specific Cash Settlement Cost Analyses for Coastal Herbaceous Wetlands in Region 2*? If not, it needs a reference for a defensible settlement.**
- ♦ **The time scale for the unit costs of each restoration type may be too broad and should be reevaluated to reflect new data as it becomes available.**
- ♦ **The cash settlement option, while supportable (particularly for smaller restoration requirements), will essentially be unusable because of its high cost per unit of services provided.**
- ♦ **By regulation, selected restoration options are to be the lowest cost option that will provide lost resources and resource services. As such, in cases where the trustees and Responsible Party carry out a full damage assessment/restoration planning process, the Responsible Party pays the cost of the lowest suitable alternative, rather than the average cost of**

regional restoration. The per acre costs should therefore be based on the lowest cost restoration option.

- ◆ Using CWWPRA projects to develop mean costs of planned and implemented restoration projects is likely to yield unrealistically high estimates, as these data sets tend not to be normally distributed. The population of projects included in the analysis is unduly influenced by high cost to benefit projects, such as CS-18, which is projected to cost more than \$400,000 per acre projected. In fact, analysis of this data set indicates that the standard deviation of project cost/benefit exceeds the mean, an indication of a significantly skewed data set.
- ◆ The estimated brown marsh costs were calculated using the average bid price from seven contractors. Whenever a restoration project is bid, the lowest qualified bidder will be chosen; therefore, it would be inappropriate to use an average bid price for this estimate. Rather the trustees should consider taking the lowest bid price of the qualified bidders.
- ◆ There is potential for double counting inherent in the calculation of projected costs. The proposed estimation methodology inflates the total cost by adding the estimated preconstruction costs, monitoring costs, and oversight costs to the implementation cost. It is not clear whether the implementation costs from such data sets as CWWPRA projects do, or do not, include many of these costs in the implementation costs already. At a minimum, some of the pre-construction costs are presented in the costs of these projects. It is likely that monitoring and project oversight costs are also included. If this is indeed the case, the projected restoration costs are artificially high.
- ◆ Projected monitoring costs are very high, especially for forested wetlands. As the data indicate, larger projects are more cost effective from a monitoring and oversight perspective than smaller projects. For example, monitoring on a four-acre marsh restoration project is more than 40 percent more expensive than on a 10-acre project and nearly four times as expensive as a 40-acre project. Since the goals of the regional restoration program is to accrue funding for the implementation of larger projects, monitoring and oversight costs should reflect the benefits of scale inherent in such projects and should not be based upon an average that inflates costs.
- ◆ Data from private mitigation banks, privately implemented restoration projects, and local governments restoration projects should be included in the dataset to be analyzed to produce restoration costs estimates. While these data may be more difficult to collect, their inclusion is critical to the accurate estimation of regional restoration costs. Private restoration projects and those implemented by Ducks Unlimited and the Nature Conservancy were not taken into account. One commenter indicated that it will forward additional data to the trustees.
- ◆ The assumptions made for the calculation of cost/DSAY estimates are difficult to decipher. Several of the assumptions made may create artificially inflated costs. More should be done to evaluate these assumptions and to make their impact on the calculations of DSAYs clear.
- ◆ Does the FPEIS provide more information on project implementation? Staff implementing the Louisiana Regional Restoration Planning Program may start inappropriately averaging and dividing costs by acres for other projects. It may be useful to have more detailed on some of the

limitations and special circumstances that make some projects more expensive than others. Additional interpretation of this information is recommended.

- ♦ **A discount factor should be shown in Appendix D-4.**

Response: The trustees have taken note of the comments on the concept of the reserved “Non-Project-Specific Cash Settlement” alternative and the underlying unit costs. These reserved sections are pending determination of feasibility of the development of unit costs for all regions. Therefore, references to the settlement alternative of “Non-Project-Specific Cash Settlement” in the September 2003 Draft RRP for Region 2 have been removed from this Final RRP document. If feasibility of the unit costs across all regions is determined at a later date, this Final RRP may be amended to include this settlement alternative.

APPENDIX H – LIST OF ORGANIZATIONS TO WHICH THE REGION 2 – REGIONAL RESTORATION PLAN WAS MAILED

- ◆ Congress:
 - ◆ United States House of Representatives - Louisiana Delegation
 - ◆ United States Senate - Louisiana Delegation
 - ◆ United States Senate/Subcommittee on Commerce, Justice, State, and the Judiciary
- ◆ Federal Agencies:
 - ◆ United States Department of Agriculture
 - ◆ United States Department of Commerce
 - ◆ United States Department of Defense
 - ◆ United States Department of Energy
 - ◆ United States Department of Homeland Security
 - ◆ United States Department of Justice
 - ◆ United States Department of the Interior
 - ◆ United States Department of Transportation
 - ◆ United States Environmental Protection Agency
- ◆ Native American Tribes:
 - ◆ Chitimacha Tribe of Louisiana (Charenton)
 - ◆ Coushatta Tribe of Louisiana (Elton)
 - ◆ Inter-Tribal Council of Louisiana, Inc.
 - ◆ Jena Band of Choctaw Indians (Jena)
 - ◆ Tunica-Biloxi Tribe of Louisiana (Marksville)
- ◆ State Legislature:
 - ◆ Louisiana State Senators
 - ◆ Louisiana State Representatives
- ◆ Louisiana State Agencies:
 - ◆ Lafourche Basin Levee District Board of Commissioners
 - ◆ Louisiana Applied and Educational Oil Spill Research and Development Program
 - ◆ Louisiana Department of Administration/State Land Office
 - ◆ Louisiana Department of Agriculture and Forestry
 - ◆ Louisiana Department of Culture, Recreation, and Tourism
 - ◆ Louisiana Department of Environmental Quality
 - ◆ Louisiana Department of Health and Hospitals
 - ◆ Louisiana Department of Natural Resources
 - ◆ Louisiana Department of Public Safety/State Police
 - ◆ Louisiana Department of Transportation and Development
 - ◆ Louisiana Department of Wildlife and Fisheries
 - ◆ Louisiana Office of Emergency Preparedness
 - ◆ Louisiana Office of the Governor
- ◆ Other State Agencies:
 - ◆ Alabama Department of Environmental Management
 - ◆ California Office of Spill Prevention and Response
 - ◆ Colorado Office of the Attorney General
 - ◆ Florida Department of Environmental Protection
 - ◆ Illinois Department of Natural Resources
 - ◆ Indiana Department of Environmental Management
 - ◆ Massachusetts Executive Office of Environmental Affairs
 - ◆ Mississippi Department of Environmental Quality

- ◆ New Jersey Department of Environmental Protection
- ◆ New York State Department of Law
- ◆ Oregon Department of Environmental Quality
- ◆ Rhode Island Department of Environmental Management
- ◆ Texas General Land Office
- ◆ Texas Natural Resource Conservation Commission
- ◆ Texas Parks and Wildlife Department
- ◆ Washington Department of Ecology
- ◆ Wisconsin Department of Natural Resources

- ◆ Parish Government
 - ◆ Acadia Parish Office of Emergency Preparedness
 - ◆ Acadia Parish Police Jury
 - ◆ Allen Parish Office of Emergency Preparedness
 - ◆ Allen Parish Police Jury
 - ◆ Ascension Parish Council
 - ◆ Ascension Parish Government
 - ◆ Ascension Parish Office of Emergency Preparedness
 - ◆ Assumption Parish Office of Emergency Preparedness
 - ◆ Assumption Parish Police Jury
 - ◆ Avoyelles Parish Office of Emergency Preparedness
 - ◆ Avoyelles Parish Police Jury
 - ◆ Beauregard Parish Office of Emergency Preparedness
 - ◆ Beauregard Parish Police Jury
 - ◆ Bienville Parish Office of Emergency Preparedness
 - ◆ Bienville Parish Police Jury
 - ◆ Bossier Parish Police Jury
 - ◆ Caddo/Bossier Parish Office of Emergency Preparedness
 - ◆ Caddo Parish Commission
 - ◆ Calcasieu Parish Office of Emergency Preparedness
 - ◆ Calcasieu Parish Police Jury
 - ◆ Caldwell Parish Office of Emergency Preparedness
 - ◆ Caldwell Parish Police Jury
 - ◆ Cameron Parish Office of Emergency Preparedness
 - ◆ Cameron Parish Police Jury
 - ◆ Catahoula Parish Office of Emergency Preparedness
 - ◆ Catahoula Parish Police Jury
 - ◆ Claiborne Parish
 - ◆ Claiborne Parish Police Jury
 - ◆ Concordia Parish
 - ◆ Concordia Parish Police Jury
 - ◆ DeSoto Parish Office of Emergency Preparedness
 - ◆ DeSoto Parish Police Jury
 - ◆ East Baton Rouge Parish Metro Council
 - ◆ East Baton Rouge Parish Office of Emergency Preparedness
 - ◆ East Carroll Parish Office of Emergency Preparedness
 - ◆ East Carroll Parish Police Jury
 - ◆ East Feliciana Parish Office of Emergency Preparedness
 - ◆ East Feliciana Parish Police Jury
 - ◆ Evangeline Parish Office of Emergency Preparedness
 - ◆ Evangeline Parish Police Jury
 - ◆ Franklin Parish Office of Emergency Preparedness
 - ◆ Franklin Parish Police
 - ◆ Grant Parish Office of Emergency Preparedness
 - ◆ Grant Parish Police Jury
 - ◆ Iberia Parish Council

- ◆ Iberia Parish Office of Emergency Preparedness
- ◆ Iberville Parish Council
- ◆ Iberville Parish Office of Emergency Preparedness
- ◆ Jackson Parish Office of Emergency Preparedness
- ◆ Jackson Parish Police Jury
- ◆ Jefferson Davis Parish Office of Emergency Preparedness
- ◆ Jefferson Davis Parish Police Jury
- ◆ Jefferson Parish
- ◆ Jefferson Parish Council
- ◆ Jefferson Parish Office of Emergency Preparedness
- ◆ Jefferson Parish Port
- ◆ Lafayette Consolidated Government
- ◆ Lafayette Parish Office of Emergency Preparedness
- ◆ Lafourche Parish Council
- ◆ Lafourche Parish Office of Emergency Preparedness
- ◆ LaSalle Parish Office of Emergency Preparedness
- ◆ LaSalle Parish Police Jury
- ◆ Lincoln Parish Office of Emergency Preparedness
- ◆ Lincoln Parish Police Jury
- ◆ Livingston Parish
- ◆ Livingston Parish Council
- ◆ Livingston Parish Office of Emergency Preparedness
- ◆ Madison Parish Office of Emergency Preparedness
- ◆ Madison Parish Police Jury
- ◆ Morehouse Parish Office of Emergency Preparedness
- ◆ Morehouse Parish Police Jury
- ◆ Natchitoches Parish Police Jury
- ◆ Natchitoches Parish Office of Emergency Preparedness
- ◆ Orleans Parish
- ◆ Orleans Parish Council
- ◆ Orleans Parish Office of Emergency Preparedness
- ◆ Ouachita Parish Office of Emergency Preparedness
- ◆ Ouachita Parish Police Jury
- ◆ Plaquemines Parish Council
- ◆ Plaquemines Parish Government
- ◆ Plaquemines Parish Office of Emergency Preparedness
- ◆ Pointe Coupee Parish Office of Emergency Preparedness
- ◆ Pointe Coupee Parish Police Jury
- ◆ Police Jury Association of Louisiana
- ◆ Port of Vermilion, Abbeville Harbor and Terminal District
- ◆ Rapides Parish Office of Emergency Preparedness
- ◆ Rapides Parish Police Jury
- ◆ Red River Parish Office of Emergency Preparedness
- ◆ Red River Parish Police Jury
- ◆ Richland Parish Office of Emergency Preparedness
- ◆ Richland Parish Police Jury
- ◆ Sabine Parish Office of Emergency Preparedness
- ◆ Sabine Parish Police Jury
- ◆ St. Bernard Parish
- ◆ St. Bernard Parish Council
- ◆ St. Bernard Parish Office of Emergency Preparedness
- ◆ St. Charles Parish Council
- ◆ St. Charles Parish Office of Emergency Preparedness
- ◆ St. Helena Parish
- ◆ St. Helena Parish Police Jury
- ◆ St. James Parish Council

- ◆ St. James Parish Office of Emergency Preparedness
- ◆ St. John the Baptist Parish
- ◆ St. John The Baptist Parish Council
- ◆ St. John The Baptist Parish Office of Emergency Preparedness
- ◆ St. Landry Parish Office of Emergency Preparedness
- ◆ St. Landry Parish Police Jury
- ◆ St. Martin Parish Council
- ◆ St. Martin Parish Government
- ◆ St. Martin Parish Office of Emergency Preparedness
- ◆ St. Mary Parish Council
- ◆ St. Mary Parish Office of Emergency Preparedness
- ◆ St. Tammany Parish
- ◆ St. Tammany Parish Council
- ◆ St. Tammany Parish Office of Emergency Preparedness
- ◆ Tangipahoa Parish Council
- ◆ Tangipahoa Parish Office of Emergency Preparedness
- ◆ Tensas Parish Office of Emergency Preparedness
- ◆ Tensas Parish Police Jury
- ◆ Terrebonne Parish
- ◆ Terrebonne Parish Council
- ◆ Terrebonne Parish Government
- ◆ Terrebonne Parish Office of Emergency Preparedness
- ◆ Union Parish Office of Emergency Preparedness
- ◆ Union Parish Police Jury
- ◆ Vermilion Parish Office of Emergency Preparedness
- ◆ Vermilion Parish Police Jury
- ◆ Vernon Parish Office of Emergency Preparedness
- ◆ Vernon Parish Police Jury
- ◆ Washington Parish Council
- ◆ Washington Parish Office of Emergency Preparedness
- ◆ Webster Parish Office of Emergency Preparedness
- ◆ Webster Parish Police Jury
- ◆ West Baton Rouge Parish Council
- ◆ West Baton Rouge Parish Office of Emergency Preparedness
- ◆ West Carroll Parish Office of Emergency Preparedness
- ◆ West Carroll Parish Police Jury
- ◆ West Feliciana Parish Office of Emergency Preparedness
- ◆ West Feliciana Parish Police Jury
- ◆ Winn Parish Office of Emergency Preparedness
- ◆ Winn Parish Police Jury

- ◆ Private Industry
 - ◆ Alpha Biotek Environmental, LLC
 - ◆ Apache Corp.
 - ◆ Arabie Environmental Solutions, Inc.
 - ◆ Associated Branch Pilots
 - ◆ Atchafalaya Water Trails, Inc.
 - ◆ Beuerman Miller Group
 - ◆ Boise Cascade/Southern Forest Resources
 - ◆ BP Amoco
 - ◆ Central Gulf Lines, Inc.
 - ◆ CH2M Hill
 - ◆ Chevron Pipe Line Co.
 - ◆ ChevronTexaco
 - ◆ CITGO Refinery Division
 - ◆ C-K Associates, Inc.

- ◆ Coastal Engineering and Environmental Consultants, Inc.
- ◆ Conoco, Inc.
- ◆ Dominion Exploration and Production, Inc.
- ◆ Dupont Specialty Chemicals
- ◆ E&E Group, LLC
- ◆ El Paso Production
- ◆ Energy Services
- ◆ Equilon Pipeline Company LLC
- ◆ Equiva Services, LLC
- ◆ ERDAS
- ◆ Exxon Mobil Corp.
- ◆ Exxon Mobil Production
- ◆ Jones, Walker, et al
- ◆ Justiss Oil Co., Inc.
- ◆ Kerr-McGee
- ◆ Louisiana Chemical Association
- ◆ Louisiana Independent Oil and Gas Association
- ◆ Louisiana Landowner Association
- ◆ Louisiana Mid Continent Oil and Gas
- ◆ Maxim Technologies, Inc.
- ◆ Merlin Management Services, Inc.
- ◆ Murray Law Firm
- ◆ Ocean Energy
- ◆ Patton Boggs LLP Attorneys at Law
- ◆ Placid
- ◆ PPG Industries
- ◆ Public Strategies, Inc.
- ◆ Pyburn and Odom, Inc.
- ◆ Rabalais, Hanna, and Hebert
- ◆ Shaw E&I
- ◆ Shell
- ◆ SMS USA
- ◆ Stolt Offshore, Inc.
- ◆ Sun Pipe Line Co.
- ◆ T. Baker Smith and Son, Inc.
- ◆ Texaco
- ◆ The International Tanker Owners Pollution Federation Limited
- ◆ Tidewater Marine, Inc.
- ◆ UNOCAL

- ◆ Non-Profit Organizations
 - ◆ Algiers Community Improvement Association
 - ◆ Ascension Parish Residents Against Pollution
 - ◆ Barataria-Terrebonne National Estuary Program
 - ◆ Black Bear Conservation Committee
 - ◆ Citizens Against Contamination
 - ◆ Citizens for Clean Environment
 - ◆ CLEAN
 - ◆ Coalition for Community Action
 - ◆ Coalition to Restore Coastal Louisiana
 - ◆ Coast Alliance
 - ◆ Coastal States Organization
 - ◆ Concerned Citizens
 - ◆ Concerned Citizens of JFK
 - ◆ Concerned Citizens of Mossville
 - ◆ Concerned Citizens of Norco

- ◆ Deep South Center for Environmental Justice
- ◆ Ducks Unlimited, Inc.
- ◆ Greenpeace
- ◆ Gulf Restoration Network
- ◆ League of Women Voters
- ◆ Louisiana ACORN
- ◆ Louisiana Audubon Council
- ◆ Louisiana Environmental Action Network
- ◆ Louisiana Environmental Justice Project
- ◆ Louisiana State University
- ◆ Louisiana Wildlife Federation
- ◆ M.E.A.N., Inc.
- ◆ McNeese State University
- ◆ National Environmental Justice Advisory Committee
- ◆ Natural Resources Defense Council
- ◆ North Lake Charles Environmental Action Now
- ◆ Pacific Coast Federation of Fishermen Associations, Inc.
- ◆ Poor People for Fair and Equal Access to Justice
- ◆ R.E.S.T.O.R.E
- ◆ Restore America's Estuaries
- ◆ Sierra Club
- ◆ South Louisiana Economic Council (SLEC)
- ◆ Southern University and A&M College
- ◆ St. James Citizens for Jobs and the Environment
- ◆ The National Academies/Oceans Studies Board
- ◆ The Nature Conservancy
- ◆ Tulane Law School
- ◆ United States Public Interest Research Group
- ◆ University of Louisiana

**APPENDIX I – ENDANGERED SPECIES ACT AND ESSENTIAL FISH HABITAT
CONSULTATIONS**

USFWS Letter to NOAA Concurring with NOAA's Determination that the Proposed Action is Not Likely to Adversely Affect Threatened or Endangered Species or their Critical Habitat



United States Department of the Interior

FISH AND WILDLIFE SERVICE

646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506

August 22, 2005

Mr. John Rapp
NOAA Restoration Center
Sea Grant Building
Louisiana State University
Baton Rouge, LA 70803



Dear Mr. Rapp:

Please reference your August 12, 2005, letter transmitting the Draft Final Regional Restoration Plan for Region 2 (RRP) and the Programmatic Biological Assessment (BA) for the RRP. You requested the Fish and Wildlife Service's (Service) concurrence with your determination that the proposed actions are not likely to adversely affect the following species under the Service's jurisdiction: the threatened bald eagle (*Haliaeetus leucocephalus*), the endangered brown pelican (*Pelecanus occidentalis*), the threatened piping plover (*Charadrius melodus*) and its critical habitat, the threatened Louisiana black bear (*Ursus americanus luteolus*), the endangered West Indian manatee (*Trichechus manatus*), the endangered pallid sturgeon (*Scaphirhynchus albus*), and the threatened loggerhead sea turtle (*Caretta caretta*). The draft final RRP identifies trust resources and services in the region that are likely to be or anticipated to be injured by an oil spill, appropriate restoration types for each of the potentially injured trust resources and services, and potentially available restoration projects for each of the restoration types identified in the RRP. The proposed restoration actions would be located in Ascension, Assumption, Lafourche, Jefferson, Plaquemines, St. Bernard, Orleans, St. Charles, St. John the Baptist and St. James Parishes, Louisiana. The following comments are provided in accordance with provisions of the National Environmental Policy Act (NEPA) of 1969 (83 Stat. 852, as amended; 42 U.S.C. 4321 et seq.), and the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

The BA and RRP describe the following 11 conceptual restoration projects that could be implemented for the restoration of injuries to potentially injured trust resources and services: (1) vegetative planting; (2) vegetative protection; (3) hydrologic restoration; (4) marsh management; (5) dredge and fill; (6) shoreline protection; (7) faunal stocking; (8) sediment diversion; (9) freshwater diversion; (10) outfall management; and, (11) nutrient and sediment trapping. As discussed in the BA, the restoration activities covered by the proposed plan would be designed to meet a "no effect" or "not likely to adversely affect" level for listed species. Any activities not meeting those levels would be addressed by a separate BA.

Bald Eagle

According to the BA, the proposed activities would: have negligible effects on foraging habitat, likely occur outside of the nesting season, would not occur in close proximity to potential nest trees, and would be temporary and occur at small spatial scales.

Brown pelican

According to the BA, the proposed activities would: have negligible effects on foraging habitat, likely occur outside of the nesting season, would not permanently affect suitable nesting habitat, and would be temporary and occur at small spatial scales.

Piping Plover

According to the BA, the proposed activities would: likely occur outside of the wintering season, not permanently affect wintering habitat, would be temporary and occur at small spatial scales, and would occur greater than 2,000 feet away from designated critical habitat.

Louisiana Black Bear

According to the BA, the proposed activities would: likely occur outside of the denning season, are not likely to occur in or near bottomland forests, and would be temporary and occur at small spatial scales. Furthermore, there is no occupied black bear habitat within Region 2 according to our records.

West Indian Manatee

According to the BA, the proposed activities would: be unlikely to occur in Louisiana coastal waters, would be temporary, and would occur at small spatial scales.

Loggerhead Sea Turtle

According to the BA, the proposed activities would: be unlikely to occur in Louisiana coastal waters, would be unlikely to occur near nesting areas, and would be temporary and occur at small spatial scales.

Pallid Sturgeon

According to the BA, the proposed activities would: occur in locations and during periods with the lowest probability of sturgeon presence within the river, are unlikely to entrain sturgeon in diversion structures due to the sturgeon's bottom-dwelling behavior, result in slight changes in river habitat relative to overall habitat availability, and would be temporary and occur at small spatial scales.

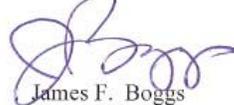
As previously discussed in our February 2, 2005, letter, the National Marine Fisheries Service is responsible for aquatic marine threatened or endangered species (i.e., the Gulf sturgeon and sea

turtles in the marine environment). Please contact their office (720/570-5312) in St. Petersburg, Florida, for further consultation concerning those species.

Based on the BA, the RRP, and the information above, we concur with your determination that the action as proposed, is not likely to adversely affect the above-listed species or their critical habitat. No further ESA consultation would be required for this action unless there are changes in the scope or location of the action or the action has not been initiated within one year. If the action has not been initiated within one year, follow-up consultation should be accomplished with the Service prior to making expenditures. If the scope or location of the proposed action is changed, consultation should occur as soon as such changes are made.

We appreciate the opportunity to comment on the proposed activity. If you have any questions regarding our comments, please contact Deborah Fuller (337/291-3124) of this office.

Sincerely,



James F. Boggs
Acting Supervisor
Louisiana Field Office

cc: LDWF, Natural Heritage Program, Baton Rouge, LA

NOAA NMFS Letter to NOAA Concurring with NOAA's Determination that the Proposed Action is Not Likely to Adversely Affect Threatened or Endangered Species or their Critical Habitat



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
263 13th Avenue S
St. Petersburg, FL 33701
(727) 824-5312, FAX 823-5309
<http://scro.nmfs.noaa.gov>

OCT 11 2005

F/SER3: JAM

Mr. John Rapp
NOAA Restoration Center
National Marine Fisheries Service
LSU
Sea Grant Building
Baton, Rouge, LA 70803

Dear Mr. Rapp:

This correspondence responds to your letter dated August 12, 2005, and enclosed Programmatic Biological Assessment for the Louisiana Regional Restoration Planning Program, Draft Final Regional Restoration Plan for Region 2 (PBA). NOAA's National Marine Fisheries Service (NMFS) received your submission on August 15, 2005. In your letter you determined that the activities identified in the PBA would not affect federally-listed whales and was not likely to adversely affect federally-listed sea turtle and Gulf sturgeon nor Gulf sturgeon critical habitat. You requested us to contact you if we disagreed with this determination.

The extremely comprehensive PBA identifies projects that facilitate restoration of natural resources injured by oil spills in southeastern Louisiana. None of the projects identified are actually planned for construction. Therefore since no specifics as to project location, time of implementation, or effect to federally listed species are identified, NMFS cannot consult on this PBA. NMFS will consult on the individual projects when they are proposed to be implemented.

We look forward to continued cooperation with the NOAA Restoration Center in conserving our endangered and threatened resources. If you have any questions, please contact Jennifer Moore, natural resource specialist, at (727) 824-5312, or by e-mail at jennifer.moore@noaa.gov.

Sincerely,

David Bernhart
Assistant Regional Administrator
for Protected Resources

File: 1514-22.E. NOAA
Ref: T/SER/2005/04314

